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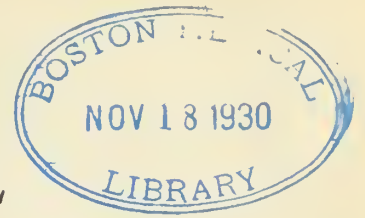
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VOL. XIX.

JANUARY, 1928

No. 1

*THE DIAGNOSIS OF CARCINOMA OF THE COLON AND RECTUM

By DANIEL FISKE JONES, F. A. S. C., Boston.

Carcinoma of the colon and rectum, the subject to be considered at this clinic, should be of interest to all those present, for whether you are a general practitioner who does no surgery, a practitioner who does some medicine and some surgery, or a surgeon who does no medicine, you are in some way responsible for these cases. The general practitioner is probably the most important member of the group, for it is upon him that the burden of these cases falls. Let us remember that he very rarely sees these cases and that the early diagnosis is difficult. Let us help him by suggesting that it is unnecessary to make a diagnosis, and only necessary for him to know a few suggestive symptoms, because we believe the diagnosis should be made by those who have an opportunity to see a considerable number of these cases.

Early diagnosis is exceedingly difficult, and yet it is only early diagnosis

of these cases that will improve the results of operation.

Three important reasons why an early diagnosis is not made are:

(1) The early symptoms are so slight the patient pays little attention to them and consults no doctor.

(2) The general practitioner is not familiar with the early symptoms and prescribes cathartics and mineral oil, which relieve the symptoms sometimes for months. During this time the patient becomes immune to the slight abdominal discomfort and waits for more severe and late symptoms.

(3) Too much confidence is placed upon the X-ray examination, which is exceedingly unreliable in early cases in the hands of the average roentgenologist.

If we consider the fact that the intestine has no sensation of pain unless the mesentery is pulled upon or unless the peritoneum of the bowel is stretched,

*Read before the Annual Meeting of the Maine Medical Association at Portland, Me., June, 1927.

it is quite evident that there will be very few symptoms from a carcinoma of the intestine until there is some obstruction. The early symptoms should be slight irritation of the colon, due to the presence of the growth and the ulcerated surface. This irritation is probably slight, but if the patient were observant, he would note that his attention was drawn to his intestinal tract slightly more than formerly. If an examination of the stool were made on several days, both macroscopic and microscopic, blood would occasionally be found. Physical examination, except in carcinoma of the rectum, would rarely reveal anything, as the growth would be too small to be felt. On the other hand, a growth in the rectum, no matter how small, would be felt or seen with the proctoscope.

It is this early stage of the disease that we should constantly strive to diagnose, but unfortunately even the late stage seems to be difficult, and it is of this stage that we are constantly being told the symptoms.

The symptoms of the late stage of the disease are simply those of large intestine obstruction, partial or complete, with the addition of the presence of blood in the stool in some cases. These symptoms are:

- (1) Increasing constipation or *frequent movements*.
- (2) Discomfort or pain in the lower abdomen.
- (3) Attacks of pain and vomiting.
- (4) Loss of appetite.
- (5) Loss of weight.

(6) Blood in the stools, either occult or shown by chemical tests.

(7) Increased fulness of the abdomen.

(8) Rarely, visible peristalsis.

Increasing constipation is of importance, but with the modern tendency to take cathartics and mineral oil, this is often not noticed by the patient. If, however, the patient is carefully questioned as to his bowel habit the history may be elicited. The statement is often made that there is a diarrhoea. This is an unfortunate term to use, as most patients distinguish very definitely between diarrhoea and frequent movements, or frequent discharges of blood, mucus and gas. Frequent movements usually follow a long period of constipation, but the alternating "constipation and diarrhoea," which many books speak of, is a difficult and rare history to get.

Again, if we ask the patient if he has had pain, we frequently get a negative answer, but if the patient is asked if there is much rumbling of gas, or discomfort, we will usually get a positive answer. Attacks of pain due to increased obstruction are not infrequent.

The location of the pain is practically always in the lower abdomen below the umbilicus, not infrequently most severe in the right lower quadrant. When the growth is in the cecum and causing obstruction at the ileocecal valve the pain is located above the umbilicus, that is, small intestine pain. Occasionally, after long obstruction and

when there is some local inflammation about the growth, the greatest pain is at the site of the growth. It is important to note that the pain from obstruction anywhere in the large intestine is most intense in the right lower quadrant, for it has led to the incorrect diagnosis of appendicitis in many cases, and we have seen several cases in which the appendix was removed and the cause of the pain left untouched.

In carcinoma of the rectum, in addition to the abdominal discomfort, there is a dull ache and heavy feeling across the sacrum and discomfort in the rectum when sitting. In far advanced cases, with metastases on the sides of the pelvis, there may be pain down one leg or the other.

Loss of appetite is of value only as an indication that there is obstruction. It rarely occurs earlier.

Loss of weight, so much depended upon in carcinoma generally, seldom occurs until after the patient has become so much obstructed he cannot eat. It is the obstruction which causes the loss of weight and not the carcinoma *per se*.

Of the physical signs there are few of value. Blood in the stool should be found early, but unfortunately the narrow scirrhous carcinoma rarely gives a positive finding. Chemical tests give negative results in growths in the left colon frequently unless the stool is liquid. The stool is usually formed on the left and the blood does not become mixed, but may be found on the outside. Careful inspection is therefore necessary. Examination of one stool

is not sufficient to be of any value. A small proportion of the cases only are anemic, but growths in the right half of the colon cause it much more frequently than those on the left. It is stated by Sir Harold Stiles that this anemia is present with growths on the right because of the greater distance over which the toxins from the growth have to travel before being expelled. It is our opinion that the growths on the right are more frequently the extensive adenomatous type, which bleed more freely than those on the left, which are more frequently scirrhous.

It may be well to state here that in any case in which the evidence all points to diverticulitis and blood is found in the stool, it must be assumed that the lesion is carcinoma and the abdomen must be explored. It has been stated that blood may be present in diverticulitis, but we believe it is necessary to assume that the cause is carcinoma.

As to physical findings, probably more valuable information is obtained by a proper digital examination than any other method. But this statement is qualified by the word proper, and to make a proper examination one must first have the incentive of believing that there may be something that can be felt; the patient must be in either the Sims, the knee chest, or the lithotomy position, depending upon the habit of the examining surgeon, and lubrication of the finger with a heavy ointment rather than the thin lubricating materials.

Not only may growths in the rectum be found, but occasionally a growth in the sigmoid will fall into the pelvis and may be felt through the rectal wall. Sir Harrison-Cripps stated, years ago, that he could feel any growth in the rectum. While I would not go so far as that, it is quite certain that a very large percentage of growths can be felt. A medical colleague of mine does not believe this statement and told me that he had not been able to feel the growth in four out of the last six cases he had seen. The only answer I can make to this is, that he has an abnormally short finger, does not lubricate it properly, does not put the patient into the proper position, or he has not the proper attitude of mind to make a real effort to find a growth. Routine examinations of the rectum are often worse than valueless, inasmuch as there is usually no incentive behind them and they frequently cause a long delay.

Proctoscopic examinations are of inestimable value, we believe, in the diagnosis of disease of the rectum and colon, not because we are often rewarded with a sight of the growth, but the negative findings are of the greatest value. Many growths in the rectum cannot be seen, especially the high fixed growth, because it is impossible to straighten the rectum out enough to see it, but not infrequently flecks of blood or brownish discharge may be seen coming from above. If a patient is examined during a period of bleeding and evidence of bleeding from above is not seen with the proctoscope, a diagnosis of hemorrhoids can be made, pro-

vided the blood is bright red and there are no symptoms suggesting disease higher up.

Perhaps the greatest value of the proctoscope is to make a differential diagnosis between chronic ulcerative colitis and malignant disease. The symptoms are often identical, but the proctoscopic findings are quite conclusive. We have never seen a case of chronic ulcerative colitis which was not evident in the rectum. If a normal rectum is found and the patient has movements consisting of mucus, pus and blood, there must be an ulceration above, and that ulceration is either carcinoma or tuberculosis and demands an exploratory incision.

As to the use of the electric-lighted proctoscope, I cannot agree with Lockhart-Mummery that the instrument must be used by an expert. We believe that any surgeon or medical man could easily become sufficiently expert to determine many important facts.

Dr. Charles Mayo states that "the Röntgen ray is now indispensable to the accurate diagnosis and location of neoplasms of the alimentary tract." This statement is true, but if we consider it to be accurate in the same proportion of cases of gastric and duodenal disease and disease of the colon and rectum, I feel sure that serious harm would be done. We believe that there is a percentage of error made by the average roentgenologist in growths in the colon which should lead the surgeon to be very cautious. One of my friends was much surprised to hear me say that there was a high percentage of

error in these cases, and implied that the röntgenologist at his hospital seldom, if ever, made an error. Within fifteen minutes after saying this, men in the audience told me of two cases of carcinoma of the colon which had been overlooked by his röntgenological department.

The X-ray should rarely, if at all, be used as a means of diagnosis in suspected carcinoma of the rectum, for the barium enema is frequently very painful and the percentage of error is exceedingly high. There is probably no portion of the intestinal canal in which a growth is overlooked so frequently as at the recto-sigmoid junction. The flexures follow close upon this region and then the cecum. The X-ray examination is of great importance, but let us not depend upon this as the only means of diagnosis.

Let me urge again that what we are after is an early diagnosis of lesions of the colon, and that can be done only by considering carefully the slightest change in the patient's intestinal habit, careful examination of the stool for blood, painstaking digital examination of the rectum, proctoscopic examination of the rectum and lower sigmoid, X-ray examination of the colon and finally exploratory laparotomy on very slight evidence of some lesion of the colon. We do not hesitate to advise exploratory laparotomy on many cases of carcinoma of the liver, stomach and other parts of the abdomen which are evidently inoperable, while we are hesitant, and frequently do not even suggest such an operation, in cases in

which there may be a carcinoma of the colon, unless we can make a positive diagnosis. Let us reverse our ideas in regard to the use of exploratory laparotomy and advise operation upon cases in which we may find an early and operable carcinoma of the colon, and turn back to our medical friends some of the cases which they wish explored and which we feel confident we can do nothing for.

Treatment of carcinoma of the colon is always surgical except in those unfit for operation. Carcinoma of the rectum is always surgical except in those unfit for any of the various surgical procedures, cases too far advanced to permit removal, and a few cases of early squamous cell carcinoma of the anal canal which have not involved the sphincter. Growths which have involved the sphincter should be operated upon when possible, as radium usually causes such prolonged and severe pain and the sphincter is destroyed to such an extent by the radium that it is frequently incontinent.

Radium used on growths above the anal canal will stop the bleeding and slow up the growth. It should be used in those cases in which the operator feels that the risk of operation in his hands is too great.

We believe that operation where it can be carried out will give a higher percentage of cures and a longer period of comfort than radium.

In carcinoma of the colon it is important to distinguish between the right and left halves. The immediate mortality in operations on the right

colon is much below that of operations upon the left half. On the other hand, recurrences are more frequent and more rapid in the right than on the left. The liver is more frequently involved in growths in the left than on the right. Drainage is rarely necessary on the right side after operation, while we seldom omit it on the left. A safety valve above the line of sutures is rarely needed in resections on the right and should rarely be omitted in resections of the left colon.

In operations upon the colon these fundamental factors must be considered.

- (1) The type of operation to be used.

- (2) The method of suture.

- (3) The prevention of pressure on the line of suture.

The type of operation to be used is of foremost importance and the choice should depend upon the condition of the patient, the amount of obstruction present, the location of the growth, and the skill and experience of the surgeon. The end-to-end anastomosis might be considered the ideal method anatomically and physiologically, but we believe that there is more often leakage following it than other methods, probably due to injury to the blood supply. It is the operation of choice where conservation of bowel is necessary.

Lateral anastomosis is less likely to leak and can be done with less soiling than the end-to-end unless an aseptic method of suture is used. The objections to it are that less bowel and less mesentery are removed as more is required for the anastomosis. Objec-

tion has also been raised to it on the ground that the proximal end beyond the anastomosis may dilate and act as a catch basin. This, however, does not occur if a short proximal end is left and sutured to the portion of the bowel beyond the anastomosis.

Both the end-to-end and lateral anastomosis should be done by the aseptic method of Kerr, or by one of the numerous clamp methods. As the danger of leakage is always present in these methods, even if a safety valve (a cecostomy) is established, a method to prevent leakage into the abdomen, the exteriorization method, used much in Europe, is undoubtedly of great value. While this method requires more bowel than the primary end-to-end suture, it is without question much safer. To accomplish this, the cut edges on the posterior portion are brought together by sutures, the peritoneum is then sutured about both proximal and distal ends and the open ends brought into the wound and left open. Later the bowel is freed just enough to bring the rest of the circumference of the cut ends together by suture and the skin closed over it. After union is established, the bowel is freed from the peritoneum and dropped back into the abdomen.

A method which has a still lower mortality, and one which is of great value, is the Mikulicz resection. This requires a considerable length of bowel above and below the growth and tends to lead one to cut too close to it. The convalescence in both these operations is much prolonged, but this should not

be considered where greater safety for the patient is obtained.

In resections of the right colon a simple end-to-end suture by the aseptic method or a side-to-side anastomosis, which we prefer, gives excellent results.

Charles Mayo suggested an end-to-side anastomosis and that the end of the colon be brought into the wound after suture so that it might be opened in case of necessity, but we believe that the distension of the ileum is of much more importance, and if a safety outlet is to be established, it should be by an enterostomy above the line of sutures. We believe that this is rarely necessary if morphia is used to quiet the peristalsis and prevent cribbing.

A safety outlet, that is, a cecostomy should be established either before or at the time of operation in all end-to-end and lateral anastomoses in the left colon. In carcinoma of the colon, it is frequently necessary to relieve the obstruction alone at the first operation. A cecostomy has in our hands been most satisfactory. It does not empty the intestine of solid matter, as a colostomy immediately above the growth will do, but it will relieve the patient of symptoms and leave the left side of the abdomen free for a resection later. It is quite sufficient to relieve the intestine of pressure after resection. A half-inch tube should be used and the bowel inverted about it. If this is properly done, no operation is necessary to close it. A great advantage of the cecostomy is that the exact location of the growth need not be determined, and in cases of obstruction a cecostomy

can be done under local anesthesia, much to the advantage of the sick patient.

In all cases of carcinoma of the colon we urge operation unless the patient is evidently too far advanced even for a palliative operation. These patients are likely to have attacks of intestinal obstruction, and many of them can be relieved of these attacks permanently by a short circuiting operation if the condition is too far advanced for a resection. A palliative operation of this kind is far preferable to a colostomy and the danger is comparatively slight.

It is our aim in all cancer cases to do something to relieve the patients of their suffering, or at least a part of it. If we only operate upon those whom we think we have a good chance of curing, we will, after a few years' experience, operate upon very few cases, and in consequence we shall not be doing our duty, which is to relieve suffering.

Operations for carcinoma of the rectum, while difficult and serious, have during recent years been systematized and improved so that the mortality is now within a reasonable range.

We have advocated for a number of years the extensive abdomino-perineal operation in one stage as the ideal operation, because it appears to be more logical and because up to very recently there have been no statistics of the lesser operations which compare favorably with the results obtained by this operation. But to care for the greatest possible number of cases, at least four operations are necessary to

keep the immediate mortality within reasonable limits. While the combined abdomino-perineal operation may be considered the ideal one, there are many patients who are not in sufficiently good condition to withstand it. The next operation to be considered is the combined abdomino-perineal operation in two stages. In this operation we have developed a method of preventing necrosis of the portion placed beneath the peritoneum. The bowel is left intact with the arterial arches accompanying it. The upper portion of the sigmoid is then brought out for a permanent colostomy, and the peritoneal flaps closed about the bowel. This permits the same extensive dissection above and assures a clean pelvis for the second operation.

A still less severe operation is that advocated by Mr. Lockhart-Mummery. This operation consists in making a permanent colostomy first, without any dissection of the pelvis from above. From one to three weeks later the perianal skin, ischio-rectal fat, levators and rectum are removed from below.

Still a fourth operation is necessary for a very few early cases: that is the combined abdomino-perineal operation in one stage in which the sigmoid is brought down through the sphincter.

With these four operations at least 60% of all cases seen can be operated upon with a mortality between 15% and 20%. Dr. Allen Whipple has suggested a cecostomy in the combined abdomino-perineal operations to be carried out several days before the first operation. It is, we believe, rational and may aid in reducing the mortality. It will be seen that a permanent colostomy is made in nearly all cases for the following reasons:

- (1) A more extensive and more logical operation can be carried out with a lower mortality than in those cases in which an attempt is made to save the sphincter.

- (2) Recurrences are frequent in the pelvis, and the permanent colostomy prevents any possibility of involvement of the bowel in this pelvic recurrence.

- (3) Necrosis of the bowel brought down is not infrequent, for the blood supply cannot be depended upon.

- (4) A fistula may develop or the sphincter may be incontinent, both of which are as distressing to the patient as a colostomy.

- (5) While a colostomy is far from an ideal condition, we know from the experience of many patients that it is far from intolerable.

ENDOSCOPY IN DISEASES OF THE AIR AND FOOD PASSAGES

By DR. J. L. JOHNSON, Bangor, Me.

Mr. President, Gentlemen of the Maine Medical Association, and Guests of the Association:

Endoscopy of the air and food passages is not new. It is interesting to note that attempts were made, as early as 1807, one hundred and twenty years ago. In 1896 and 1897 successful attempts were made, and a foreign body was removed from a bronchus by Killian. However, not until nearly one hundred years after the possibility of the thing had been conceived did a combination of modern electrical manufacturing, with the patience and genius of Jackson, Patterson and their co-workers, place endoscopy of the air and food passages on a firm basis.

The field of peroral endoscopy is divided, for convenience, into laryngoscopy, bronchoscopy, esophagoscopy and gastroscopy. The terms are self-explanatory. I shall not endeavor to cover adequately the several branches, nor shall I touch upon the technic. That, in a paper of this sort, would be not alone impossible, but would be undesirable. Briefly, it consists in the passage of a hollow tube, distally illuminated in the case of the Jackson instruments, proximally in the Bruning and others, into the larynx, bronchi, esophagus, or stomach, as the case may be, and by this means, together with special instruments used through the tube, examining and treating the several parts, under the guidance of direct vision.

Indications, or perhaps it is better to say, conditions, in which endoscopy is of use.

Dyspnea of the laryngeal type, characterized by sinking in of the suprasternal notch, with or without aphonia, is an indication for direct laryngoscopy, if for any reason a clear visual inspection cannot be obtained, and a clear diagnosis be made by indirect means. It may be due to diphtheria. If it is diphtheria, a direct examination does no harm. It may clear up the diagnosis. It is possible to intubate directly, or by removing membrane from the larynx or even from the bronchi, to avoid intubation or tracheotomy. Your suspected diphtheria case may be due to foreign body. Any case of supposed laryngeal diphtheria that does not improve on adequate dosage of antitoxin should have a direct examination, if possible. I remember very well, some years ago, a child diagnosed as laryngeal diphtheria, intubated and allowed to die. Post-mortem examination revealed the trouble as a foreign body, in this case a piece of glass in the larynx.

Dyspnea may be caused by abscess. I saw a child a few months ago in consultation. It was a baby eight months old. History of onset of cough, fever and some dyspnea about a week previous to my seeing her. She got better and worse. Finally one morning she became very much more dyspneic and cyanotic. General examination and exploration of the throat with the finger

revealed nothing. Direct laryngoscopy showed a large abscess, arising from the posterolateral pharyngeal wall, at about the level of the glottis. This was easily evacuated under direct vision with a suction tube in situ and the patient in extreme trendelenburg. Dyspnea in a child is often due to enlarged thymus. This usually shows up on Röntgenogram and is amenable to Röntgen ray therapy. If, however, your therapy is not promptly effectual the child is entitled to direct examination. About three years ago a child was admitted to the Eastern Maine General Hospital, complaining of dyspnea and hoarseness. Röntgen ray diagnosis was enlarged thymus. The shadow disappeared promptly under treatment. The symptoms did not. Later direct examination revealed multiple papillomata of the larynx.

Hoarseness, or aphonia, in adults or children, if for any reason a clear inspection cannot be made by indirect means, indicates a direct examination.

Asthma.—Not every case of asthma, of course, will be cured by bronchoscopy. But I suggest to you that we will do no harm and may do some good in the cases that are not benefited by other treatment.

Pulmonary Suppuration.—Probably the two conditions receiving most attention from bronchoscopists are the foreign body cases and pulmonary suppuration. Pulmonary suppuration arises following operations on the mouth, nose and throat, under local or general anesthesia. It occurs after accidents wherein the chest or lung has been damaged or ma-

terial has been aspirated. It occurs fairly frequently, according to the reports of Myerson and others, after attacks of pneumonia and influenza.

It is perfectly true that there are many cases of lung suppuration that are entirely surgical, and other cases that are cured by medical treatment. There is, however, a large group of cases of more or less localized suppurative process that are not approachable except by bronchoscopy. Through the bronchoscope one can inspect the openings of the bronchi under direct vision. Thick mucus plugging the openings can be removed. Swollen mucosa can be treated to favor drainage and aeration. The abscess cavity can be aspirated. Treatment by whatever means seems best can be easily and accurately applied directly to the diseased area.

Again, injection of radio opaque material, plus the aid of the Röntgen ray, enables us to map out accurately the location and extent of the lesion. In this manner we may be of considerable aid to the surgeon in those cases that are not essentially endoscopic.

These cases are diagnosed asthma, chronic bronchitis, tuberculosis, and a variety of things. The case with chronic expectoration of purulent material, the case of tuberculosis that never shows bacilli, is open to suspicion and should be carefully Röntgenographed, and, if there are no contraindications, bronchoscoped.

Furthermore, the longer one of these cases goes without proper treatment, the less chance there is of a cure. Myerson says, "For the present I am of

the belief that an abscess of more than three months' duration will take much longer to cure than one of lesser duration, and those of longer duration will not result as cures."* If this be true—and it seems reasonable—it is logically not good practice to wait too long, even on cases that might recover spontaneously. We have no means of knowing which cases these are. By waiting too long we may prevent a cure in a case that otherwise might be cured by bronchoscopy. Tucker makes the very pertinent remark concerning these cases that "many are cured, many improved, none are made worse."† Also, even the case which, because of long duration or extent of the lesion, is hopeless as a cure, should be treated. These are usually very miserable people if untreated. We can improve drainage and aeration, lessen the amount of secretion, lessen the odor, lessen the amount of absorption, with the result that the patient may become one who can have at least a part of the pleasures and usefulness of life. I believe that the time will come when a proper co-operation between the bronchoscopist, the Röntgenologist and the surgeon will reach and cure many of these now hopeless ones.

Foreign Body Cases.—For these there is no substitute for endoscopy. I feel that it is in order to consider briefly the diagnosis of foreign body cases, because unfortunately they are often not diagnosed. The records of any bronchoscopist will show cases of foreign body in the air and food passages that have

remained undiagnosed for months and even years.

History.—A positive history of the ingress of a foreign body always calls for complete investigation. A negative history is of absolutely no value. Many cases will give a negative history even though questioned specifically, and even though there is a foreign body present.

The symptomatology differs, depending on the lodgment of the foreign body. It depends also obviously on the pathology. The pathology, in turn, depends upon the nature, chemical composition, size and shape of the intruder, modified by the reaction of the tissues in which it lodges.

The patient has aspirated or swallowed some object. There has been a more or less brief choking or gagging spell. They may or may not have spit up a little blood. If it is in the larynx the complaint may vary from a slight hoarseness to complete aphonia, dyspnea, cyanosis and death from strangulation, depending on the size and position of the object. In the lung, depending on its size and shape, it may so obstruct a bronchus that there is a complete block, or only ingress or only egress of air is obstructed. The result is emphysema or atelectasis in that part of the lung. The mucosa swells, increasing the obstruction. Secretion is increased and dammed back. Infection sets in. The lung beyond the block is filled with purulent material, the so-called drowned lung. The picture is now the pneumonic one. In the food

passages we have a different structure to deal with. We do not encounter infection, unless perforation or severe bruising has occurred. The symptom is dysphagia of varying degree. Depending on the size and shape of the intruder, on whether it is smooth, or has sharp edges or corners, we have a picture varying from no complaint to complete block, with severe pain and regurgitation.

Two cases from our records will perhaps be illustrative.

CASE I.—Boy, eleven years, admitted to the Eastern Maine General Hospital bringing a film showing an upholstery tack in right lower lobe bronchus, and cloudy lung field. There was a suspicion of fluid at the base. Temperature 103, pulse 120, respirations 35. His father stated that nine weeks before admission he had aspirated the tack. He had a short coughing spell. Two or three days later he was taken ill, with fever, cough, etc. A physician diagnosed pneumonia. He recovered in about a week. Since then several—at least three—similar attacks. He recovered each time, but never became entirely well. He never had a Röntgenogram, and the possibility of a foreign body, in spite of the father's story, seems to have been ignored. The day before admission another physician took a film, revealing the tack. He was referred to the hospital. The tack was removed by bronchoscopy in about five minutes. He promptly began to recover and was discharged cured in five days.

CASE II.—This was also an uphol-

stery tack case. It perhaps shows the pathology better, as you will see by the film which I believe Dr. Ames will show you. A boy of seven aspirated a tack. He was removed at once to a local hospital, where a Röntgenogram showed the tack on the right side close to the mid line. It was thought to be in the esophagus, but coarse food did not move it. The next day an unsuccessful bronchoscopy was attempted, under general anesthesia. On arrival at the Eastern Maine General Hospital the child had fever, some dyspnea, some cyanosis, decreased motion of the right lower chest, and a grunting cough. A Röntgenogram showed a typical picture of interference of aeration of that portion of the lung, atelectasis and displacement of the heart to that side. It also showed the tack, which was not absolutely necessary. The tack was removed without event by a brief bronchoscopy. The boy was discharged cured in three days.

Malignancy of the esophagus can be diagnosed accurately by means of the endoscope. It can be diagnosed earlier probably than by any other means. Biopsy material may be secured. Finally it may be treated with radium under direct vision.

Malignancy of the lung may be primary or secondary. Some observers state that primary malignancy of the lung arises in the bronchi in as high as 90% of cases. Early diagnosis can be made surely only by bronchoscopy. The symptoms and physical signs, including Röntgenogram, may be consistent with foreign body, abscess, tubercu-

losis, or some other condition. In other words, it may be the picture of obstruction of a bronchus with retained secretion, or it may be the picture of pulmonary hemorrhage. Ante-mortem diagnosis figures from different clinics vary from 10% to 90%. I believe the lower figure to represent the clinics that do not use the bronchoscope.

Contraindications.—Someone has said, "Where endoscopy is indicated, there are no contraindications." Bruning, in his textbook, says, "Examination of the air and food passages by the direct method makes very heavy demands on the skill of the operator and on the endurance of the patient."† I wish to take sharp issue with this remark. The demands on the surgeon may truly be great, but anyone who has ever seen a skilled endoscopic team—for it must be team work—will easily be convinced that the endurance of the patient is taxed only a very slight amount. Funk, however, in a recent paper does give certain contraindications. He lists them as follows:

For diagnosis.

1. In a patient who has not been thoroughly studied clinically and by Röntgenogram.

2. In the presence of aneurism of the aorta.

3. In the case of a recent hemorrhage.

4. If there is active pulmonary tuberculosis.

5. In a moribund patient.

To these I will add three that appeal to me:

1. A case of diagnosed or suspected status lymphaticus.

2. A marked case of toxic goitre.

3. Where there has been recent severe trauma or caustic burn, so that there is danger of perforation.

In a therapeutic sense Funk gives the following:

1. Purulent pneumonia or that purulent condition that precedes abscess formation.

2. Multiple abscess formation.

3. Extensive bronchiectasis, involving the whole lung or part of both lungs.

4. Localized abscess that can be easier treated by thoracotomy.

5. Localized bronchiectasis with marked fibrosis and distortion of the structures.

6. Marked cardiac weakness.

7. Presence or suspected imminence of serious complications, such as meningitis, uremia, etc.‡

These may be contraindications, it is true, yet in the individual case endoscopy might rationally be done even in the presence of any of these conditions.

In brief, the decision for or against endoscopy, in the individual case, rests only upon this question: Do the advantages reasonably to be expected from examination and treatment, under direct vision, outweigh the dangers that may be encountered, by virtue of the condition of the patient?

Preparation and handling of endoscopic cases.

A complete, careful, general physical examination should always precede endoscopic procedure. This serves at

least two purposes. It rules out or shows up any of the conditions that might be definite contraindications. It gives us valuable information as to what dangers we may reasonably expect, and what and how much we may reasonably expect to have to do.

Röntgenology.—We at the Eastern Maine General Hospital try to follow the rule of the Jackson clinics. We do not use films taken some time before operation. The films should be taken in two planes, and should involve the use of bismuth or other radio opaque material where necessary. Dr. Ames is, I think, to go into this phase of the subject in a separate paper.

Anesthesia.—General anesthesia is rarely necessary. Children need no anesthetic, local or general. Adults need usually cocainization of the pharynx, larynx and tracheal bifurcation. The cases are handled very gently. They are talked to quietly. The procedure is explained. They are reassured that they are not going to be hurt or choked. The value of co-operation is explained. About one hour before operation they receive an appropriate dose of morphine with atropin or scopolamine.

I wish to emphasize this point of avoiding general anesthesia. The reasons should be obvious. First, they add to the dangers at the time of operation, through shock, embarrassment of respiration, cardiac strain, etc. Second, they add to the dangers after operation. The passage of a smooth sterile endoscope, carefully done, sets up very little if any reaction. The addition of any

chemical vapor, such as ether, does set up a reaction. The chances of that added irritation, changing a case that otherwise would get well to one that will not, are, to my mind, very real. Third, general anesthesia is bad because it is unnecessary. The work can be done easily, painlessly and successfully without it.

There are, of course, exceptions to this as to every other rule. General anesthesia is required, as noted by Jackson, in the following conditions:

1. Foreign bodies in the esophagus of such size or shape that the musculature must be relaxed before they may be removed safely.

2. Removal of small laryngeal growths in excitable patients who will not co-operate.

3. Removal of growths such as edematous polyps, that tend to so shrink under cocaine as to make removal impossible.||

Where shall this work be done? It requires a large armamentarium. It requires careful personal sterile technic. It requires trained co-operation. In short, it must, to be done safely and to advantage, be done as team work in the operating room of a hospital equipped to handle this work. It cannot be done casually in the small hospital. It cannot be done in the home.

The foreign body problem will be much less of a problem when it is generally appreciated that such things exist, are not rapidly fatal, are common, and that they may be found and removed if only someone will search for them. The case with the positive history of the

ingress of a foreign body, the case of obstructive dyspnea, the case that shows interference with aeration of a part of a lung, the case with chronic foul expectoration, the case of a typical tuberculosis without bacilli, are all entitled to careful investigation and inspection under direct vision. The case of dysphagia or regurgitation is entitled to visual examination and should not be treated by blind bouginage. In short, the ideas that I wish to bring out are:

That endoscopy is not a trying ordeal for the patient.

That the field for its use is very wide and growing daily.

That endoscopic cases are common rather than rare.

That it is applicable wherever examination and treatment of the air and food passages, under the guidance of direct vision, is desirable.

That by its use many cases heretofore considered hopeless may be helped and even cured.

*Myerson. Ar. of Otolaryngology, Vol. II, No. 2.

†Tucker. Recent reprint.

‡Bruning & Howarth. Bronchoscopy.

§Funk. Ar. of Otolaryngology, Vol. II, No. 2.

||Jackson. Peroral Endoscopy.

COUNTY NEWS AND NOTES

Kennebec County Medical Association

The annual meeting of the Kennebec County Medical Association was held Thursday evening, December 15, 1927, at the Augusta General Hospital.

The meeting was called to order at 4.30 P. M. by the President, Dr. Frederick T. Hill, and was turned over to Dr. Warren B. Sanborn, who had charge of the clinical session. Several interesting case histories were presented by Drs. Maurice A. Priest, Samuel Kagan, and Frederick T. Hill. At the conclusion of the clinical session a business meeting was held.

The minutes of the last meeting were read and approved.

Dinner was served at 6.30 P. M. This was followed by a report of the retiring officers.

The Treasurer's report was read and approved.

The President's address was delivered by Dr. Frederick T. Hill, of Waterville.

Drs. George H. Campbell, of Augusta, J. P. Goodrich, of Waterville, and G. H. Alexander, of Gardiner, were appointed a committee on nomination of officers for the ensuing year, and reported as follows:

President—Dr. Richard H. Stubbs, Augusta.

Vice President—Dr. W. H. Price, Gardiner.

Secretary and Treasurer—Dr. F. R. Carter, Augusta.

Censor—Dr. H. E. Williams, Mt. Vernon.

Delegate to Maine Medical Associa-

tion—For three years, Dr. F. T. Hill, Waterville; Alternate, Dr. M. A. Priest.

The nominees were elected for the ensuing year.

The President, Dr. Richard H. Stubbs, appointed the following members as a committee on Public Relations: Dr. George A. Coombs, Augusta, Dr. George H. Coombs, Augusta, Dr. Frederick R. Carter, Augusta.

The President also appointed the following members as a committee to carry on the work already started in the "Hard of Hearing Children": Dr. F. T. Hill, Waterville, Dr. E. E. Jackson, Augusta, Dr. C. F. Kendall, Augusta, Dr. O. W. Turner, Augusta, Dr. V. C. Totman, Oakland.

Dr. Ralph W. Bicknell, of Winthrop, was elected to membership.

The application for membership of Dr. Norman B. Murphy, of Augusta, was received and referred to the Board of Censors.

The scientific session followed. "Obscure Otolaryngologic Infections of Infancy," by Dr. Frederick T. Hill; "A Review of Epidemic Anterio-Poliomyelitis," by Dr. Thomas A. Foster, of Portland. There was a general dis-

cussion of both papers, which brought out many interesting points. Dr. C. F. Kendall, Director of the Maine Department of Health, gave a résumé on the infantile paralysis situation in this state. This was followed by a few remarks from Dr. Herbert H. Twitchell, President of the Maine Medical Association.

The members and guests present were: Drs. G. H. Coombs, A. G. Long, Wm. O'Connor, R. L. McKay, C. W. Dyer, M. A. Priest, V. L. Lathbury, G. R. Campbell, W. Sanborn, R. F. Carter, R. H. Stubbs, E. H. Jackson, N. B. Murphy, C. F. Kendall, of Augusta: J. F. Hill, V. C. Totman, R. L. Reynolds, J. P. Goodrich, J. E. Poulin, F. T. Hill, H. W. Abbott, B. O. Goodrich, J. G. Towne, H. L. Hill, of Waterville: Elmer E. Ladd, of Readfield; H. E. Williams, of Mt. Vernon; W. W. Hendee, of North Vassalboro; R. D. Simons, L. M. Cole, A. B. Libby, G. W. Alexander, W. N. Price, of Gardiner; J. E. Odiorne, of Cooper's Mills, and T. A. Foster, Herbert F. Twitchell, of Portland.

Respectfully submitted,

FREDERICK R. CARTER, M. D.,

Secretary.

NEWS

Emory University to Raise \$4,500,000 for Medical Education

Medical education is to receive a total of \$4,500,000 from the \$10,000,000 Expansion Fund now being raised by Emory University, Atlanta. This money will be distributed as follows:

Endowment for the School of Medicine, \$2,000,000; endowment for the Wesley Memorial Hospital, \$2,000,000; Pathology Laboratory and Hospital Administration Building, \$225,000; Nurses' Home, \$200,000; completion of Chemistry Building, \$75,000. The goal of

the campaign as a whole is to provide \$6,500,000 in endowment and \$3,500,000 in new buildings to cover the estimated needs of all six schools of the University for the next ten years.

The Emory School of Medicine, formerly the Atlanta Medical College, has long been one of the three largest and strongest A-grade medical colleges in the South. It has a total of 3,400 alumni now practicing in all states of the union but two. Dr. Russell H. Oppenheimer is dean of the faculty of 130 men, among the part-time members of which are some of Atlanta's most eminent physicians and surgeons.

For many years the School has been handicapped, both in research and teaching work, because of inadequate endowment. The enrollment in each class has been limited to sixty men at a time, when more physicians of Georgia alone are dying each year than the two medical colleges of the state are graduating. The School is looking to its alumni and to the other friends of medical education to give the funds so urgently needed for expansion.

Annual Clinic at Eastern Maine General Hospital, Bangor, Maine

A clinic, which has come to be the regularly established policy of this hospital, was held here on December 12th and 13th, to which all were cordially invited. Ward rounds and clinical demonstrations were held from 9.30 A. M. to noon and 2.00 P. M. to 5.00 P. M. each day. This clinic was given

by the Visiting Medical Staff of the hospital in conjunction with the Penobscot County Medical Society.

Members of the County Society were asked to bring in some interesting cases for the clinic and present them, with full case histories, on the afternoon of December 13th. If anyone desired to present a case, he should notify the Superintendent not later than Friday, December 9th. The laboratory and X-ray facilities of the hospital were at the disposal of those physicians who wished them, to aid them in the presentation of their case.

Any physician desiring to send a patient into the hospital for this clinic could do so by arranging with the admitting officer of the hospital to have the patient admitted not later than Thursday, December 8th, in order that full histories and all laboratory and clinical data could be ready for the clinic.

The following well-known physicians were in attendance from Boston: Dr. Channing Frothingham, Peter Bent Brigham Hospital; Dr. Daniel F. Jones, Massachusetts General Hospital; Dr. Frederic J. Cotton, Boston City Hospital.

The Penobscot County Medical Society held its regular monthly meeting and dinner at 8.00 P. M. on December 13th, in the dining room of the nurses' residence at the hospital. The speakers were Drs. Frothingham, Jones and Cotton, of Boston.

NOTICE

**United States Civil Service Examinations,
Washington, D. C.**

The United States Civil Service Commission announces the following open competitive examinations:

Assistant Medical Officer
Associate Medical Officer
Medical Officer
Senior Medical Officer

Applications for these positions will be rated as received by the Civil Service Commission at Washington, D. C., until June 29, 1928.

The examinations are to fill vacancies in various branches of the service throughout the United States.

There are vacancies in practically all branches of medicine and surgery, but there is especial need for medical officers qualified in tuberculosis or neuropsychiatry.

Competitors will not be required to report for examination at any place, but will be rated on their education, training and experience.

Full information may be obtained from the United States Civil Service Commission at Washington, D. C., or the Secretary of the United States Civil Service Board of Examiners at the post office or customhouse in any city.

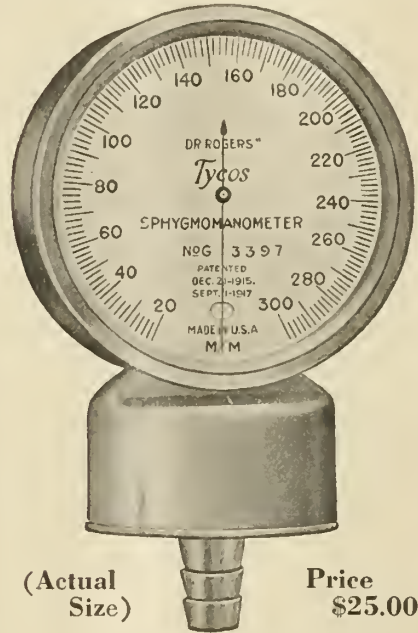
BOOK REVIEW

The Principles of Sanitation. By C. H. Kibbey. 354 pages, 32 illustrations. F. A. Davis Co. Price, \$3.50.

In his many years as Chief Sanitary Inspector of a large industrial corporation, Mr. Kibbey has had much practical experience in sanitation, but he does not do himself full justice in this book, which is hardly more than a superficial presentation of material already available in other form. For the beginner in sanitation, or for those who wish an introduction to the field of sanitation, it is worth study; but the worker in the health field will find little that is new.

W. A. H.

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No. 2

*SURGICAL

By DR. JOHN S. RODMAN, Philadelphia, Pa.

I have chosen to-day to address you on a subject much discussed in both medical and lay circles, but in spite of all of this it remains almost as much a scourge of the present as it has been of the ages. Admittedly one of the five chief causes of death, there is much more opportunity to be pessimistic than not in the surgical management of cancer. It is only by persisting in looking for what hope lies in the situation, however, that we will be able to save as many of the sufferers from this disease as it is possible to do with the knowledge which we now have. The real cure of cancer awaits the genius who will some day announce the discovery of its exciting cause, but I am one of those who believe that there is plenty of room for optimism in its proper management to-day.

This exacts many things of us: A knowledge of the very earliest known symptoms and signs of cancer as it appears in various regions; a familiarity with the pre-cancerous lesions of these regions; a nicety of judgment in applying to each case the most effective means

of cure — surgery, X-ray or radium alone or in combination. It is, therefore, because we can do so much if we refuse to become discouraged over the failures to cure late cancer (and unfortunately most of the present day statistics are based on attempts to cure late cancer), that I venture to discuss with you some of the phases of this well-worn subject.

ETIOLOGY

Research into the cause of cancer has now been going on for some time the world over, but unfortunately we are left up to the present, for the most part, where we have been for all of these years, still in complete ignorance except in regard to some of the predisposing factors. I do not believe that infection with vegetable or animal parasites plays any part in this process in spite of the recent contributions to this subject by Peyton Rous, Sye, and others. James Ewing, of New York, than whom none know more about the pathological processes of cancer, is evidently of this opinion, as in a recent article he states that "If cancer is due

* Read before the annual meeting of the Maine Medical Association at Portland, Me., June, 1927.

to the action of an unknown microscopic, perhaps ultramicroscopic, universal parasite, then effectual prevention must wait upon its discovery. At the present day, I have no hesitation in committing myself without reservation against this theory. With most general pathologists, I regard it as incompatible with the known facts about cancer. The assumption of a universal cancer parasite can be held only by those who assume, in addition, that cancer is a single disease, comparable to syphilis or tuberculosis. This assumption appears to be untenable. Cancer is not a single pathological entity, but a great group of diseases, of very varied origin and course. Virchow divided biological processes into three grand classes: normal growth and functional changes, inflammation, and neoplasia. Neoplastic reaction of tissue cells is comparable to inflammatory reaction. There are about as many neoplastic diseases as infectious diseases, and no more reason for assuming a single origin for the one than for the other group. If there were less anticipation of the imminent discovery of the universal cancer parasite, fewer announcements of its demonstration, and more recognition of the specific exciting factors in cancer, the cause of cancer control would be benefited."

To me it seems more likely that the activator of the lawless growth of the cell unit may possibly be found in the chemical laboratory. C. H. Mayo has called attention to the fact that cancer develops best in an acid medium, as, for example, cancer of the stomach. The alkaline duodenum, on the other hand, is almost free of it, and when cancer does develop in an alkaline medium this reaction is changed to acid possibly because of the cancer process

itself. However this may be, there can be no doubt that all kinds of chronic irritation play an important part in the predisposing etiology.

To apply this fact to the particular type of cancer under discussion in this paper, that of the breast, I certainly can see no reason why cancer should not develop frequently on a chronic inflammatory process here as we know it to do in other regions of the body, especially so since the breast is admittedly given to epithelial unrest. This cannot explain all of the instances of cancer of the breast, however, as it develops so often in breasts which have never been the seat of chronic inflammation. To again quote Ewing, he states with regard to this question in the same article previously referred to, "I believe, however, that mammary cancer practically never arises in a previously normal breast, but always in an organ altered by involution or inflammation. Many cancers arise from the sweat glands of the breast, and here the causation is probably somewhat different from that of the common duct cancer. The sweat gland cancers usually appear near the axilla, or near the skin, and they are particularly frequent in subjects with oily skins and marked development of the sweat glands of the body.

Many observers have pointed out the prominence of stagnation of secretion in the cancerous breast, and Keynes has emphasized the part played by stagnation in chronic mastitis. Cheatele also has emphasized the importance of chronic irritation by retained secretion in the development of cysts and periductal fibrosis in chronic mastitis.

From the dissection of many cancerous breasts I have long been impressed by the evidence of stagnation in the

ducts leading from the cancerous area, but it must be admitted that in many breasts, especially atrophic organs, the gross evidence of stagnation has not been clear. Yet in the earliest case of breast cancer that I have seen, 2 mm. in diameter in a girl of 21, the infiltrating fully developed cancer surrounded a single duct distended by secretion.

This entire question has been greatly illuminated by Bagg, who has produced mammary cancer in mice by withdrawing the young at birth and causing stagnation of milk in the ducts and acini. In a strain of mice found for many years to have a low natural incidence of cancer, he produced cancer in 85 per cent. of the animals by breeding them rapidly, and withdrawing the young at birth. The tumors developed at a very early age, after the third or fourth litter. They appeared suddenly at one or more points in the system of ducts, recurred after removal, and killed by metastasis. Ligation of the ducts along one side of the animals was followed by cancers in the breasts of that side but not in the nursed side. This contribution is the first experimental production of a major form of cancer by a method which probably duplicates that occurring naturally in human beings. Over-nutrition and excessive functional stimulus of both breast and ovaries probably occupy the stage with stagnation in these experiments, but there can be little doubt that stagnation is the prime factor.

Adair has pursued the factor of stagnation in the human breast as a cause of cancer. In two hundred mammary cancer subjects taken at random, only 8 per cent. gave a history of approximately normal lactation. In several cases cancer appeared in a breast which

for some reason was not nursed, while the other breast escaped. In many cases retracted or inflamed nipples were the cause of failure to nurse.

An astonishing amount of inspissated or puriform material can be drawn from many cancerous breasts by the breast-pump. Extending the observations to chronic mastitis, Adair finds that most breasts with chronic mastitis yield considerable, or large, amounts of secretion, often inspissated, upon the withdrawal of which, under massage and heat, the indurated nodules and cysts often completely disappear.

We have thus clinical, anatomical, and experimental data indicating that stagnation of secretions is a prime factor in the causation of chronic mastitis and mammary cancer, and a basis is thus laid for the hygiene of the breast and the prevention of mammary cancer.

Finally, in so far as etiology is concerned, we can not ignore heredity. The tendency has, of late years, been to pay too little heed to heredity in all forms of cancer. The splendid work of Maud Slye clearly proves that she can produce by mating, at will, mice who will develop cancer if an irritating local factor is added. So this is fresh proof of what has always seemed likely, that a favorable soil for the development of cancer is handed down by generations, although the proof is lacking that the disease itself is transmitted.

The classical symptoms of breast cancer are, for the most part, late symptoms, and when all are present—and he who runs may read—the diagnosis will be made too late to save over 25 per cent. of the total number operated on, no matter how thorough the operation be. Such symptoms as retraction of the nipple, fixation of the breast to the chest

wall, "orange peel" skin, enlarged axillary glands must be considered as such. Are there any early symptoms which may be considered to be reliable? Unfortunately there are not, and the sooner that we realize that this is so, and that we must learn to appreciate that many lesions ordinarily classed as benign are potentially malignant in that they may become cancer, the more cases will we save. The one symptom that is necessary is "tumor," and that finding alone should suffice to send the patient for a surgical consultation. Too many have lost their lives because of the fatal advice to pay no attention to the tumor until it becomes painful. As all of us know, cancer in its early stages is never painful. While it would lead us too far afield from the subject of this paper to completely describe each of these benign diseases, those often having a precancerous bearing must be mentioned.

In our experience chronic cystic mastitis, the next most frequent disease of the mammary gland to cancer, is by far the most important of these. This disease, unlike cancer, is often bilateral, is not characterized by a single tumor mass in the breast but by several masses which are tender on pressure. Both breasts, if diseased, are larger than normal, and if only one be affected, it is larger than its fellow. Superficial veins on the affected side are more prominent than usual. The characteristic symptom, however, of this condition is pain. It is quite unlike the painless beginning of carcinoma, when the latter develops as such. The pain of chronic cystic mastitis is usually limited to the breast itself, is dull, aching in character, and always worse at the menstrual cycle. At times this pain may be referred to the arm on the affected side. While

no discharge from the nipple is characteristic of this condition, it is not unusual to find that there has been a thin watery secretion. In one hundred consecutive cases we have found this disease to be more common during the decade of forty to fifty, although quite young women are at times affected by this process as well as those of more advanced age. For example, the writer has operated on three cases of this nature in women under twenty, in one of whom the disease was bilateral. It is more common in married than in single women, but among the former it will be more frequently seen in those who have not borne children. The most interesting feature of chronic cystic mastitis, however, is the fact that various investigators have found it to be frequently the forerunner of carcinoma. While more recent pathological work has tended to show that this condition, and others which have been felt to have had a definite importance in this respect, do not become malignant as often as was formerly thought, the weight of the evidence is still predominately in favor of its malignant potentialities. The frequency with which chronic cystic mastitis has become malignant has been variously estimated to be from 13 to 40 per cent. In our own series of one hundred consecutive cases clinically diagnosed as chronic cystic mastitis the microscope proved carcinomatous change to have taken place in 23 per cent.

While it would be interesting to fully discuss the pathological nature of chronic cystic mastitis, taking up in order the various theories advanced to explain its nature, such a discussion would lead us again away from the subject of this paper. Suffice it to say, that

we strongly feel that this disease is, next to carcinoma, the most important one of the pathological conditions which affect the mammary gland for the reasons which have already been stated, namely, its frequency as well as the evidence that it is often the forerunner of cancer. We will continue to feel strongly in regard to this matter until much more evidence is submitted, both clinical and pathological, to the contrary.

There is another condition of the breast which, while not so frequent as that just discussed, has even a greater malignant potentiality, namely, intracystic papilloma. In a series of two hundred consecutive cases of diseases of the breast occurring in our experience this disease occurred in six instances. It is unilateral, occurs in married women between forty and fifty as a rule, and presents but one symptom—this, however, being pathognomonic. This symptom is a discharge of pure blood from the nipple and is due to the fact that the cyst containing the papillomatous growth is centrally located, and, therefore, the discharge of blood has a ready outlet through the nipple. In the six cases in our experience four were proved to be malignant by the microscope, so that we look upon this condition as malignant and treat it as such.

A more common pathological finding in the mammary gland, particularly of younger women, is the benign solid tumor. It is not necessary to go into diagnostic findings of this condition, as such are well known and have often been described. The important fact to bear in mind, however, in connection with these benign tumors is that at times we find them undergoing malignant change. Sarcoma more often de-

velops upon these tumors than carcinoma.

While a great deal more could be said in regard to so-called benign lesions becoming malignant, we hope that we have at least called attention to the fact that, as there are no known early symptoms of carcinoma of the breast when it develops as such, the only hope of early diagnosis lies at the present time in appreciating the malignant potentiality of such benign lesions. As stated in a recent paper on this subject, we feel that we must come back to the thought that a lump in the mammary gland occurring at any age is pathological, does not belong there, and unless good reason exists to the contrary, should be removed. Only in this way can we forestall the development of cancer and remove it in its earliest stage.

Fifty years ago found the operative management of malignant disease of the breast in its infancy. In the main, the development of the operation to its present-day level has been an American achievement. While the pathological knowledge of mammary conditions has been largely contributed from German and English sources, we find about fifty years ago the younger Gross (Samuel W.) performing in this country the most radical of operations for the cure of mammary cancer. At that time many of the pathological advances that have since been made were not thought of, and therefore it seemed that removal of the gland itself was all that was necessary to cure the condition. We can understand why, following this plan, many operators of that day were pessimistic, and that the contemporaries of the younger Gross failed to cure any of these cases. We can also understand

why Gross himself cured 9½ per cent. of the cases he operated upon, as he removed with the gland a fairly large amount of the surrounding skin, allowing the wound to heal by granulation. The wide removal of skin has become since his time a principle of the radical breast amputation. In his early work Gross did not think it necessary to do an axillary dissection, which is the next step added to the operative procedure, making it possible to save at least as many more again as were saved in Gross' early series. To his credit be it said, he was first to recognize this necessity, and by adding as complete an axillary dissection as one can with the pectoral muscles in situ, he succeeded in raising the percentage of cures from 9½ to 21 per cent. A few years after Gross' work first attracted attention, Sir Mitchell Banks, of Liverpool, published about the same results, namely, 21 per cent. of cures. It is interesting to recall how similar were the operative procedures of these men, who were operating at about the same time, and with about the same technique, and with about the same results. Sir Mitchell Banks advocated and practiced extensive undermining of the skin, so that he was able, by thus sliding the skin edges together, to close a large number of his wounds. This principle is made use of to-day in the modern breast amputation. Sir Mitchell Banks did not remove the pectoral muscles, considering it unnecessary to do so, but did carry out a fairly good axillary dissection. We next find that distinguished New York surgeon of the past generation, Dr. W. T. Bull, saving 26 per cent. of his cases with an operative technique much the same as that used by Banks and Gross. It remained for

Halstead, in 1894, to advocate and practice the routine removal of the pectoral muscles, a step which has become a part of the modern technique. It seems, however, that, although Halstead has received credit for this step in the operation, Willy Meyer, of New York, quite independently, and at the same time, advocated the same procedure. Halstead's work at the Johns Hopkins Hospital did a great deal to further the cure of cancer of the breast. In fact, although his work was founded on, and made possible by, that of Gross and others that had gone before, he became known with some justice as the "father of breast surgery" in this country. As a result of the thorough operation performed by him for this condition, he succeeded in obtaining 44 per cent. cures.

In 1908, my father, W. L. Rodman, advocated and first began to use the technique which I believe to be the most thorough, as well as calculated to yield the best results, in the operative management of this condition.

In a recent paper on this subject I have shown that in 68 consecutive private cases, 49, or 72 per cent., were symptom free after three years; 34, or 50 per cent., for five years or over; 14, or 25 per cent., ten years, and 6, or 8 per cent., for fifteen years. Dennis and Cheyne have also reported 50 per cent. of five-year cures. While Volkmann formerly taught that three years was a safe limit to consider a given case cured, we now know that such cures should not be claimed until the five-year period has elapsed.

The addition of X-ray and radium has undoubtedly been most helpful in conjunction with surgery. The breast,

being a surface organ, should yield to the direct attack of these agencies with much greater hope of success than cancer of deeper structures. Greenough, in *Surgery, Gynecology and Obstetrics* for May of this year, states: "In a study which has just been completed of a series of cases of cancer of the breast at the Huntington Hospital some interesting facts have come to light. One hundred twenty-seven cases were studied that entered the hospital in the years 1917, 1918 and 1919. Of these, 42 were primary cases; 8 were operable, and 34 inoperable. The inoperable cases treated with X-ray lived on an average eight months longer than those that did not have X-ray treatment. There were 55 cases which showed recurrences following radical operation for cancer of the breast. Of these, the patients who received X-ray treatment lived on the average six months longer than those who did not. There were 30 cases that showed recurrence after incomplete operation. Of this number, the fifteen cases that received X-ray treatment lived on the average twenty months longer than did those without X-ray. It is to be noted also that in the earlier and more favorable cases (those without evidence of internal or remote metastases) the advantages of X-ray treatment were most conspicuous. Of these more favorable cases, those given X-ray treatment averaged sixty months, while those that did not have it lived on an average only forty-three months, a difference of nearly a year and a half for each patient to the credit of the X-ray.

This seems to be positive and definite evidence of the value of X-ray therapy in cancer of the breast, but it should be noted that of the cases here recorded

which entered the Huntington Hospital prior to 1920, only one of the recurrent cases is now living, and that a case in which the diagnosis of recurrence in supraclavicular glands was not proved by pathological evidence. Every other case is dead with the exception of six of the eight cases culled from this mass of unfavorable material as suitable for attempt at radical cure by operation. Eight cases were operated upon and six of these are now alive and well.

Thus we may say that cases of cancer of the breast, whether primary or recurrent after operation, derive definite and positive benefit from X-ray therapy. Life is definitely prolonged, but such cases are not cured in the sense that they are cured by surgery.

These statistics, as well as the experience of most others working in this field, clearly indicate the value of radiation. It is our own custom to give routine post-operative X-ray treatment to all of our operated cases. I do not believe, however, that pre-operative X-ray treatment is desirable, as in giving it one loses valuable time by postponing operation.

Metastases from cancer of the breast may appear almost anywhere, while such metastases occur more frequently in the mediastinum, lungs, liver and ———. In our own series metastasis to the vertebra has been a distressingly common occurrence. I have seen but one case of metastasis to the brain, which occurred about eight months after operation in a woman forty-seven years of age.

My own conclusions, after analyzing the records of two hundred twenty-four breast cases occurring in my father's and my own practice, then, are:

1. A large per cent. of these cases

are inoperable when first seen (25 per cent. of our own cases—29 per cent. Cancer Commission of State of Pennsylvania).

2. If a diagnosis of carcinoma of the breast can be made with practical certainty before operation not over 25 per cent. will be cured.

3. If a diagnosis is made in the "pre-cancerous" stage, 100 per cent. of cures will result. If in the stage of "microscopic" cancer, about 72 per cent. in our own experience.

4. The symptoms of cancer of the breast, as described in the textbooks of surgery are, for the most part, late symptoms.

5. Until the actual cause of cancer is found, and a new treatment based on that discovery is established, we must learn to recognize the "potentiality" of cancer rather than the "actuality."

6. The knowledge which we now have is sufficient to cure a much larger percentage than is now cured, if universally applied.

*PUBLIC HEALTH

By E. D. MERRILL, M. D., Dover-Foxcroft, Maine

*Mr. President and Members of the
Maine Medical Association:*

Just who wished on me the presentation of a paper on "Public Health" before this distinguished body, I do not know, nor why. Perhaps it is just as well, for he or they certainly placed our friendship in jeopardy. However, it may not be a waste of our time to gather into the space of a few moments a partial summary of public health activities and the physician's relation thereto.

By public health I assume that we mean the health of the public in the mass, as in cities, towns and smaller communities, as affected by communicable diseases and the efforts put forth to control and prevent them in contradistinction to such private conditions as fistula in ano, or adenoids, proctitis or laryngitis, which we can have with-

out being obliged to report them. We Americans have *some* liberties left untrammelled.

Mark Twain said that people talked a lot about the weather, but nobody seemed to do anything about it. Now a lot of people talk about health, and a lot of people are trying to do something about it, wisely or unwisely. Somewhere along the various highways crowded by human beings seeking the road to health, misdirected by alluring signs or dishonest guides, should stand the physician like the efficient traffic officer to warn of danger and direct aright.

Federal, state and local official health agencies, and numerous volunteer health organizations, are doing a wonderful work in health education and disease prevention. Here are a few pertinent points concerning their work:

* Read before the annual meeting of the Maine Medical Association at Portland, Me., June, 1927.

The number of public health nurses employed in the United States on January 1, 1924, according to a "census of public health nursing in the United States," was 11,171. Of these, 57 per cent., or 6,398, were under official administration and 43 per cent., or 4,773, were employed by volunteer agencies. (Note: In the three years which have elapsed since this census was made, it is reasonable to suppose that the number of such nurses has increased at least 10 per cent.) There are 1,160 full-time public health officers, state, city and local, according to information furnished by the National Health Council and the National Tuberculosis Association.

State Health Departments in the United States, in figures given for their most recent fiscal year, expended a total of \$18,893,923.41. Local health departments as far back as 1922 expended \$28,000,000.00. It is reasonable to assume that since 1922 the total appropriations for city and town departments of health have passed the \$30,000,000.00 mark.

Volunteer health agencies, including public health associations, tuberculosis associations, visiting nurse associations, child welfare societies, in a recent twelve months, according to an estimate supplied by a worker in the ranks of volunteer health activities, expended approximately \$15,000,000.00. The largest single item of revenue for these expenditures is derived through the annual sale of Christmas seals, under the national auspices of the National Tuberculosis Association and expended state and locally by organizations affiliated with the National Tuberculosis Association. The foregoing figures do not include expenses for the maintenance

of tuberculosis sanatoria, except for \$1,131,205.00 included in the total official health expenditures for Massachusetts. The figures for tuberculosis sanatoria operation and maintenance under official agencies were not available at the time of the preparation of this paper, but a fair estimate would be in the neighborhood of \$10,000,000.00.

Thus we have: Annual Expenditures by State Health Departments, \$18,893,923.41; Annual expenditures by Local Health Departments, \$30,000,000.00; Annual expenditures by Volunteer Agencies, \$15,000,000.00; Annual expenditures for Maintenance of State and Municipally Owned Sanatoria, \$10,000,000.00; Total, \$73,893,923.41.

What is the work of these official and volunteer health agencies doing for America? Vital statistics show that the average length of life is steadily increasing. In the decade from 1910 to 1920 the increase in the length of the average life was four years, and since 1850 about eighteen years has been added to the average life. Communicable and preventable disease is rapidly being brought under control. The appalling loss of lives among infants is steadily being decreased. An astonishing decrease in the morbidity and mortality rates among wage-earners is evident. Without question this is one of the causes, if not the principal cause, for the increased prosperity of the people of the United States.

We all can remember not so long ago when sickness was the chief topic of conversation. Now health and its conservation is a more popular subject for general conversation. Take up any daily newspaper and glance at the ads and you will find that breakfast food concerns, bakeries, dairies, fruit stores,

groceries and other concerns dealing in food products are emphasizing health, and nearly all newspapers and magazines contain special or syndicated health talks.

What is the relation of the medical profession to this great development? The health protection measures promulgated by state and local boards of health, the health educational teachings of the volunteer health agencies are based upon the findings of scientific medicine, but it was not until recently that the medical profession began to take its proper place in the organizations which devote their energies to the conservation of public health.

So far as we know, Maine was the first state to develop a real working partnership in which the three principal groups, the Maine Medical Association, the volunteer group as represented by the Maine Public Health Association, and the official group as represented by the Maine State Department of Health, began to develop the first state-wide constructive practical, co-operative and sound public health program. The Maine plan of co-operation has been studied by many outside authorities, who have pronounced it good. You know, of course, that the medical policies of the M. P. H. A. are submitted to and approved by the Committee on Public Relations of the Maine Medical Association before they are put into effect. The Maine State Commissioner of Health is a member of the Maine Medical Association's Committee on Public Relations.

The American Medical Association is conducting, and has for years conducted, a vigorous campaign against fraudulent health advertising as related to patent medicine concerns,

which fleece the public of their cash while deluding them into delaying proper medical treatment until too late for adequate relief.

There are four very definite groups vitally concerned in any health program. The first is the medical profession, which provides the basis upon which public health work is to be conducted. The physicians need to be and should be consulted on medical policies of both the official and the volunteer health agencies, for in this way many mistakes may be avoided. Another group is the official health group, as represented by state and local boards of health, which is charged with the enforcement of health laws and regulations, the supervising of water and food supplies, etc. Another group is the volunteer group, as represented by the volunteer health agencies, whose function it is to arouse and inform the public through health educational campaigns and demonstrations of local, county and state health programs which they carry until the public is awakened to its value and is prepared to vote taxes to have the work carried on by the official agency. The fourth group may be designated as the general public, upon whose behalf all of these other activities are conducted. It is the public which suffers through prevalence of preventable disease, and it is the public which profits through the control and the ultimate suppression of such diseases. The leaders of the various groups which form the general public—the industrial groups, the women's clubs, the commercial, social and civic groups—should, and in Maine do, form themselves into an advisory body for general health activities. Through the influence of the leaders of these various

groups, a medium is provided for the transmission of constructive health educational measures to the various bodies which they represent. More and more the physician, by regular or periodic examination of his patients, and by advice to them on health conservation, is coming to be a physician of preventive medicine. Any of us would prefer to keep our families well, happy and prosperous than to be called in too late to be of much service other than to relieve suffering in the few remaining days of life—a life which might have been extended otherwise for many years of useful service in society.

Having in mind the activities of the official and unofficial, federal, state and municipal health agencies, together with the fraternal and lay organizations; considering all that the science of sanitary engineering is doing to protect public health, not forgetting the products of the laboratories and the specialties of the pharmaceutical manufacturers urged upon the profession as specifics; when every effort is being put forth to protect human life from the prenatal stage through the seven ages, and to prolong the latter mayhap by the monkey gland treatment, what as private physicians ought our place to be in relation to public health? As I see it, these are some of the things we may do:

1. Support federal and state laws having for their purpose disease prevention and health promotion.

2. Instruct our patients and the public, when occasion offers, in the nature of diseases and the means by which they are communicated. Such knowledge allays needless fears and leads to intelligent co-operation.

3. Be interested and a leader in

your community in all health matters, particularly sewerage disposal and pure water supply.

4. Aid local health officer in intelligent enforcement of quarantine laws.

5. Be a health inspector and report to your local health officer any unsanitary condition coming to your attention. Some day we shall have sanitary inspections of living quarters and premises as a means of lessening the danger of infectious diseases as we now have inspectors to lessen fire hazards.

6. If inspection of school children is wise—and it is not doubted—it is logical to keep up periodic examinations through life, and ours is the duty to advocate what will some day, perhaps, become compulsory as a public health measure.

7. Don't be afraid to advocate sterilization of habitual criminals and the mentally unfit.

8. Support all beneficent health legislation, and oppose, wisely and judiciously, legislative measures inimical to the public good.

9. Advocate the holding of clinics by county societies for diagnostic and demonstration purposes.

10. Participate constructively in the work of well-meaning volunteer health organizations and societies.

11. Let us strive to uphold the best traditions of our profession. Let us have courage without bravado, vision without being visionary, charity, sympathy and tolerance without being maudlin, modesty without being subservient. Above all, let us be honest, and so shall we stand as private physicians allied to and an asset in the work of promoting public health. [Applause.]

*THE WOMAN'S AUXILIARY

By MRS. DAVID PARKER.

The idea of constructing a woman's auxiliary to the medical profession was born in the brain of a Texas woman. Following that suggestion, in 1917 the Dallas County Medical Auxiliary of Texas was formed. The following year, 1918, an auxiliary to the Medical Society of Texas was organized. Four years later, at the meeting of the A. M. A. in St. Louis, with the sanction and approval of the House of Delegates of that body, a National Auxiliary was formed. The resolution and discussion of this may be found in the transactions of the House of Delegates, St. Louis, May, 1922, pages 42 and 45. I give you this data because I want you to know that we have the backing of the highest medical authority in the United States.

In May, 1927, twenty-seven states, including the District of Columbia, sent delegates and reports to the meeting of the Auxiliary A. M. A. and nine more states were reported in progress of organizing. This year we felt that we had received the stamp of approval from this same highest medical tribunal when, at the invitation of Dr. Phillips, our National Auxiliary President was received by the House of Delegates and asked to address them.

In giving this subject your just consideration, your first reaction is naturally, "What is its purpose?"

It is primarily to act as an intelligent medium between the medical profession and the laity; to interpret properly their ideals and aims; to act as liaison officers between the medical

profession and the numerous lay organizations to which all women belong, and to participate in the altruistic work that constitutes so large a portion of the doctor's obligation to society, so that it may no longer be said that in the absorbing interest in the scientific side of your profession you are losing sight of the humanitarian aspect, and that we may help to restore you to that position held by your fathers, that of trusted and beloved friend, as well as medical adviser.

The specific work that each auxiliary shall do depends upon the need of the state in which it is situated, and this field is very large. Briefly, the general aims and functions of the auxiliaries are these:

That they furnish entertainment for the wives of the attending physicians and surgeons at the state and county meetings, in order that medical attendance may be increased and greater interest shown; also that we may develop a closer feeling of friendship and co-operation, and help to break down the barriers of factionalism and of individualism—two of the greatest foes of organized medicine. The Executive Secretary of the Medical Society of New Jersey, speaking before the Woman's Auxiliary of that organization, made some very pertinent statements on this subject, which I would like to quote.

"Not the least important thing for you to do will be to stimulate attendance at medical gatherings. See to it that your man regularly attends medical

* Stenographic Notes of Address at Annual Banquet of the Maine Medical Association.

meetings. The records show that only about 15% of the state society members attend the annual convention. Is your man among that number? It is important that he should be, for a study of the list discloses that this small group includes most of the successful and prominent members of the profession. Do not get, and do not let him hold, the idea that he may lose something by absence from home to attend these meetings. What he gains by such fraternization far more than compensates for a lost fee. As you directly profit by his advancement, it is your duty to promote his development in this way."

To assist the profession in doing the needful things in health movements, carrying from the city to the farthest rural districts the program of better health and sanitation, to be the educators and the distributors of these measures. Among these health movements is the work in cancer control, the prevention of preventable diseases, otherwise known as the Seymore plan, and the spreading of the gospel of pure milk, pure water, and pure food—working on these lines, always, with the public health official.

To stimulate interest in the periodic health examinations by the family physician, urging the medical profession to begin at home. This movement can be made one of the greatest assets in preventive medicine, and pays to the physicians not only physical but financial returns. It is hoped that all insurance companies will demand a certificate of health examination for applicants for insurance policies, an examination made during the year of the application. (Metropolitan Life Insurance Company.)

To bring the states which are not in the birth registration area into that area—a very important step in the South and the West—and to help collect all vital statistics.

To assist in securing better medical legislation. By this we do not mean to become "politicians" in the objectionable sense of the word; we do not mean to be aggressive, nor to lobby, but to exert our influence in unison with the male members of our family, to take an active interest in moulding public opinion, in educating the public as to what ethical medicine stands for, and what laws are advantageous to the people as well as to the medical profession. There is no organization which can put across to the men who go to the legislature to make your laws what you want enacted, or what you do not want enacted, like the women's auxiliary to your medical society. It is your organization to do with as you please.

Also, right here, I might say that some of the physicians themselves need to know more about these bills. Most of you doctors have little time to devote to this work, but the auxiliary will be prepared, always under the guidance of your chairman of Legislation, to send to its members detailed valuable information of these bills as they come up. This information can be passed on to the male members of the family, thus adding another bond of common interest between the doctor and his wife.

(State the case of the Pennsylvania Auxiliary.)

It is work of this kind which, in the five years of our existence, has won us the unqualified support of many of the leading men of the country, such as Dr. Pussy, of Chicago, Dr. Harris, of

Alabama, Dr. Haggard, of Kentucky, Dr. Norman Henry and Dr. Wayne Babcock, of Pennsylvania, Dr. Olin West, Dr. McReynolds, of Texas, Surgeon-General Cummings, and many others.

The work that the auxiliary can do for New Hampshire is typical of what it can do for Maine and the other New England States. We are six states closely allied physically, economically, politically and religiously. We do not need to stress, as the South and the West do, health and sanitary problems, for nature and our already good state laws have provided for that; but there is a crying need to stimulate medical attendance at the state and the county meet-

ings, and to increase the interest in these meetings, and to find some strong and logical point of contact between the medical profession and the laity, that public opinion may be moulded in all matters pertaining to ethical medicine.

This work can be done by women of the Auxiliary of the A. M. A., already a mighty army of earnest, devoted, intelligent women, exemplifying to the full the true meaning of an auxiliary—"an organized reserve force."

This organization is sure to become a dominating factor in the medical life of America, and it is not fitting for New England to fail to take her place in this great movement, that tradition has always accorded her. [Applause.]

CLINICAL LABORATORY SERVICE IN THE UNITED STATES

STATEMENT BY THE COUNCIL ON MEDICAL EDUCATION AND
HOSPITALS, A. M. A.

During the last decade there has been much discussion in medical and laboratory journals, and particularly on the platform of medical and laboratory conventions, regarding the status of the clinical laboratories of the country. Especially it was regretted that the practice of clinical pathology, regarded as one of the medical specialties, had fallen into disrepute. The fact was lamented that the laboratory work had fallen into the hands of lay technicians and had become the toy of persons who had a purely commercial point of view and very little training for the work. Much disgust and quite a strong note of despair was sounded by those few members of the medical profession who had

championed the cause of clinical pathology and had adopted that specialty as a life work.

Many letters were received at the office of the American Medical Association from practitioners of pathology and leaders in medicine, regretting the drift toward lay commercialism, and urging that something be done to counteract it. What to do about it was a question. Organizations of chemists were interested because some of their members ran laboratories. Likewise organizations of clinical pathologists, bacteriologists, and of the medical profession were equally interested. Some of these organizations, working alone, undertook to investigate and to stand-

ardize the practice of clinical pathology, hoping to check the drift of that practice into the hands of technicians and to restore it to its rightful place as a medical specialty. The efforts of those organizations, working single-handed, were of little or no avail except to emphasize the enormity of the task and the necessity for co-operation.

CO-OPERATION EFFECTED IN 1923

The necessary co-operation of the laboratory and the medical organizations was brought about in 1923 at the annual meeting of the American Medical Association in San Francisco. At that time, delegates sent by the American Chemical Society and the American Association of Pathologists and Bacteriologists separately petitioned the American Medical Association to establish some supervision over clinical laboratories. This led to the appointment of three committees, representing the American Chemical Society, the American Association of Pathologists and Bacteriologists, and the Council on Medical Education and Hospitals. At a joint meeting of these committees in Chicago, early in 1924, after much deliberation, certain basic principles underlying sound laboratory service were agreed upon, which stress especially a qualified *bona fide* director as the prime essential. The joint committee agreed that the work could best be conducted by the Council on Medical Education and Hospitals.

The first steps were: (a) to secure a complete list of laboratories in the country; (b) the preparation of a country; (b) to prepare a schedule of essentials in an approved clinical laboratory and (c) to prepare a questionnaire by which the essential facts

regarding each laboratory could be obtained. Each of these measures was carried out with the advice and the co-operation of fifty or more clinicians and others expert in laboratory work, including the committeemen of the above-named organizations, and by the officers of the American Society of Clinical Pathologists, which very early showed an interest, and from which the Council has received a hearty co-operation.

After being revised and adopted by all parties interested, the questionnaire was mailed to all the laboratories of the country and a most hearty response was received. A complete report of the survey, "Essentials of an Approved Clinical Laboratory," and a preliminary list of laboratories which appeared to be fully complying with those "Essentials," were published in the "Hospital" number of the *Journal* for April 3, 1926. The facts as published were submitted to the House of Delegates of the American Medical Association at the Dallas session in 1926 and approved by that body.

To assist in giving as fair consideration as possible to each application for approval, a strong committee of laboratory experts was formed in every state or section of the country. Those committees aggregate one hundred and twenty individuals, representing, as equally as possible, the co-operating organizations, and hence the interests of the laboratory profession. Under the direction of the Council, each committeeman makes his investigation and renders his report or advice independently of other committeemen in the same district.

At the present time, of the three hundred and fourteen laboratories that have reported, one hundred and fifty-

one, after careful investigation, have been placed on the approved list and other applications for approval are constantly being received.

The Council lends all possible assistance to laboratories whereby they may become eligible for admission to the accepted list. Every laboratory that makes a report and signifies a desire to conform to the requirements is informed in regard to any deficiencies. The spirit of this movement all the way through is constructive. Anyone who knows the condition of the laboratory field at the time this survey was begun would not expect very telling or spectacular results to be shown by this time; nevertheless, there are ample reasons for believing that actual improvements are being made: (1) A number of laboratories formerly run by technicians, and only nominally under "medical" directors, have come under the ownership and the actual control of clinical pathologists of high professional standing and ripe experience; (2) a number of laboratories under the control of technicians have gone out of business; (3) the "Essentials" have been published repeatedly, and thus have been brought to the attention of all persons working in the field of clinical pathology; (4) there is an increased demand for pathologists to man the clinical laboratories of the country; (5) the director of the Mayo Foundation says that the salaries offered the pathological graduates of the Foundation are double those offered to other graduates of the

Foundation; (6) the feeling of unsteadiness indicated in the discussions of a few years ago has subsided to a considerable degree, and there is a more hopeful attitude on the part of clinical pathologists themselves.

FUTURE OUTLOOK

The movement is still in its beginning, but a good start has been made. To what extent doctors have actually discontinued sending specimens to unapproved laboratories and are sending them to approved laboratories is not known. The educational results, however, are becoming increasingly evident. In order to secure the best analyses for the benefit of their patients, as well as to best conserve the interests of the medical profession, physicians should refuse to have their work done at laboratories conducted under the direction of non-medical individuals. Much depends, also, on the continued hearty support of the various organizations and individuals who operate in the laboratory field. That this is already assured is indicated by the promptness with which laboratories are filling out and returning the form that has recently been mailed out by the Council on Medical Education and Hospitals for a complete and needed resurvey of laboratory service. The resulting data from this survey will be published for the benefit of all. Of course, any laboratories that are not yet on the list will be promptly considered for approval, if they express such a desire.

NECROLOGY

Charles Benjamin Hoit
Liberty, 1867-1927

Dr. Hoit was born at Dixmont Sept. 14, 1867, the son of John Nelson and Josephine Smith Hoit. After a good education, he taught school, worked on a farm, and, attending lectures at Bowdoin, was graduated at the Bowdoin Medical School in 1887, a very capable and youthful student. He practiced first at Stetson for one year, and after that at Liberty for the remaining twenty-nine years of his life. His health was undermined in attending upon his son at Camp Devens in the early part of the late war, and he worried greatly over the state of affairs in those days. From this exertion he never truly recovered, and last July, while driving his motor, he suffered a shock in his right arm, but by rare presence of mind saved himself and his passengers from an accident. After spending the rest of the summer at his cottage at Hampden, he was on the point of planning to resume his practice at Liberty, when he died very suddenly from symptoms of angina.

Dr. Hoit's reputation amongst his associates was excellent. He was very fond of reading of all sorts, medical and educational, and also much given to

music. He was devoted to his large and extensive country practice.

He is survived by a widow, born Miss Ruby Fuller, and sons.

Victor Lagerson,
Westbrook, 1873-1927

It is very interesting to notice how Dr. Lagerson was born in Denver, obtained his medical degree in Georgia, practiced first in New Sweden, in Aroostook County, and ended his life in Westbrook. He was born the son of William and Christine Lagerson, in Denver, Colorado, and after a good education at Bethany College, in that part of the country, and later on at Atlanta, he settled in New Sweden amongst the Swedish population brought there by Hon. W. W. Thomas as thrifty settlers. After a long and arduous practice in that scattered region he moved to Westbrook, where he was elected city physician at one time, was interested in the schools, and early took up the topic of physiotherapy and chemotherapy. By post-graduate courses from different metropolitan centers, he soon became well known in these branches of medical practice and gave many public lec-

tures concerning it in this country, as well as in Canada.

Whilst attending his patients in his office on Saturday, Nov. 5th, he left one of them, went to his wife complaining of feeling unwell, and in an instant he was gone, probably from angina pectoris. He is survived by a widow, who was Miss Hilam Anderson, four sons and a daughter.

Ivory Pease Tash
Fairfield, 1848-1927

After carrying home some heavy baggage from the train from Fairfield, where he practiced, to Skowhegan, where he lately lived, Dr. Tash died suddenly December 17, 1927, from heart failure. He was born in Exeter, June, 1848, the son of John Tash of that town, and was nearly eighty years of age at his death. He was educated partially at the Bowdoin Medical School, but won his degree at the New York Medical School in 1879. After marrying, in Massachusetts, Miss Elizabeth Crooker, of Stockton Springs, he settled after their honeymoon in Corinna. After a year or more he moved to Clinton, and thence into Fairfield, where at his death he had practiced forty years. His wife dying in 1925, he continued his office in Fairfield, but resided in Skowhegan, and was planning for a winter in California when he died.

Dr. Tash had a very large clientage amongst the poor, for many miles around, made his charges to them very low, knew the circumstances of all of them, and in this way he led a busy life, and did a great deal of kindness, which will not be easily forgotten to his memory.

J. A. S.

Charles Sargent Underhill
Ogunquit, 1884-1927

After practicing in Sullivan, Dr. Underhill moved a few years ago into York County, at Ogunquit, and there continued a career which medically has been successful in Hancock County. A little while before his death he became afflicted with a hernia, for which he was operated on, apparently with perfect success, when something intervened on his way to a cure and he died at St. Barnabas October 8th.

He was the son of William Burton and Sarah Ruth Sargent Underhill and was born at Camden, N. H., Feb. 4, 1884. He had a good academic education at two or three different colleges and obtained his degree at the College of Physicians and Surgeons in Boston in 1912.

He settled, as has been said, at once at Sullivan, but after a while changed his place of practice, where his fellow practitioners found him a congenial man and people learned to like him.

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*SYSTEMIC INFECTION OF OTOGENOUS ORIGIN

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There is a prevailing contention among otologists that systemic infection originating in suppurative middle ear and mastoid disease is of much greater frequency than is generally supposed. This is by no means a foregone conclusion, as the otological literature presents many cases of atypical sinus thrombosis unrecognized prior to operation or autopsy. One is also reminded of those more or less clearly defined cases which are at times quite baffling to one in whose work otology constitutes so small an integral part.

Doubtless the greatest achievement in otology has been the lessened mortality from the complications of suppurative middle ear disease. A more appreciable reduction in mortality will result from a greater dissemination of knowledge relative to these conditions by the men in general medicine. It is

with the desire of pointing out the importance of early recognition, and of calling to mind the salient features of diagnosis and treatment of otogenous infections, that this paper is presented to this society.

ETIOLOGY

Otogenous infections may produce sinus thrombosis in one of the following ways:

1. By extension of thrombotic processes in the smaller veins, and in the veins of the membrane lining the mastoid cells.

2. By contiguity, where infection in the overlying bone directly infects the sinus wall.

3. A perisinous abscess may exert pressure on the sinus wall, whereby a slowing of the blood stream takes place, and extension of infection through the

*Read before Portland Medical Club, March, 1927.

sinus wall produces a thrombus within the lumen of the vessel.

4. By direct extension through the floor of the tympanic cavity to the jugular bulb, infection by this route being enhanced when a dehiscence exists in the floor.

As these changes must needs be considered secondary to disease of the mastoid process, a presentation of the antecedent mastoid pathology may serve well at this time.

Probably the most comprehensive treatise on the pathology of these lesions is that quite recently presented by Kopetsky.¹ A few excerpts from his work will follow:

Subsequent to some constitutional disease, an acute nasopharyngitis, tonsillitis, sinusitis, or associated with the exanthems, the middle ear becomes affected. Sooner or later there appear signs and symptoms which are recognized as indicative of mastoid disease. An X-ray examination reveals the cellular spaces to be indistinct or destroyed.

Operation discloses a destruction of the cellular walls. The mastoid process is the seat of an abscess cavity, filled with pus and necrotic tissue. The protective forces of nature in the form of granulation tissue are observed about the edges of the infected area.

In cases coming to operation later in the course of the disease, the lesion will be found to have extended beyond the confines of the mastoid process. Some portion of the mesial boundary is found to be involved. Either an extradural or a perisinous abscess is observed, depending on the area of the

inner table destroyed. The pressure of the pus about the sinus wall produces a slowing of the blood stream, and there occurs an extension of infection into the sinus itself.

In sharp contrast to this lesion is the one productive of sinus involvement through direct blood stream infection, the so-called hemorrhagic type of mastoiditis. This type of lesion does not affect the bony intercellular walls. The membrane lining the cellular spaces is thickened and swollen. It bleeds freely and continuously. The cells contain no pus, but are filled with a serosanguinous fluid. Protective granulations are wanting. Nature's only barrier to this type of infection is to be found in the thrombi within the vessels of the membrane and of the mastoid process. Microscopic examination of the membrane reveals the arteries, veins and capillaries engorged with blood, and the venules are found to contain small thrombi.

Extradural and perisinous abscess is rare, and occurs only as a breaking down of an infected thrombus in the region of the dura or sinus. Here progression of the disease results from extension of the thrombotic process. The bony plate is apparently unaffected and the sinus wall shows no abnormality. X ray examination reveals the cell walls to be intact, though a slight haziness may be present. This particular type of mastoid disease manifests an early tendency toward metastasis, and constitutes a most treacherous type of infection.

Rarely a thrombophlebitis occurs

primarily in the jugular bulb, by extension of infection through the floor of the tympanic cavity, or through a dehiscence in this structure. This is more apt to take place in children.

According to Braun,² lateral sinus thrombosis may terminate in one of five ways:

1. The patient dies of a septicemia before the clot breaks down.
2. The clot breaks down in the center, perforates the outer sinus wall, discharging into the cavity of a perisinous abscess.
3. Perforation takes place toward the cranial cavity, resulting in a meningitis or cerebellar abscess.
4. The thrombus may become organized and cause obliteration of the sinus.
5. The thrombus may be absorbed with recanalization of the sinus.

OCCURRENCE

Lateral sinus thrombosis is the most frequent endocranial complication of suppurative middle ear disease.

Hassler,³ in compiling the results of 116 deaths from intracranial infection, found sinus thrombosis in 48, meningitis in 40 and cerebral abscess in 28. Gerber⁴ observed it 41 times in 1,100 operative cases. It is said to be of more frequent occurrence on the right side than on the left. However, this is a moot question. It is not frequent in children under seven years, nor is it common in persons over forty, occurring in the majority of cases during the first two decades. Sinus thrombosis follows both the acute and chronic types of otitis media. Fraser⁵ observed

it to be twice as frequent in the chronic type of ear suppuration.

BACTERIOLOGY

The type of infection plays a very important role in the course of clinical symptoms of this disease.

The great majority of cases of lateral sinus thrombosis are due to streptococcus infection of either the hemolytic or anhemolytic type. The hemolytic type is present in every case of hemorrhagic mastoiditis. Next in frequency is the streptococcus mucosus (now termed the pneumococcus type III) and the staphylococci. Mixed infections are less frequently observed. This is substantiated by the statement of Kerrison,⁶ that in acute suppurative disease of middle ear and mastoid there is greater danger of intracranial complications developing from a pure than a mixed infection. Staphylococcus septicemia, though very unusual, has been recently reported by Lillie⁷ and by Holderman.⁸

Libman⁹ believes the blood culture to be positive in 90% of cases. It should be taken early and repeatedly, and if possible during or immediately following a chill.

Kopetsky reported a positive blood culture of 100% in cases of osteothrombotic phlebitis. These findings are indeed remarkable, and most surely impress one of the gravity of hemolytic streptococcus infection in the middle ear and mastoid.

The leucocyte count in more or less severe mastoid suppuration may vary between 12,000 to 16,000, with a polynuclear count of 80% to 88%. In complicated cases it is markedly increased,

varying between 20,000 to 30,000, and associated with a polynuclear percentage of 90% to 94%. A repeatedly and increasingly high leucocyte count is very suggestive of sinus thrombosis.

SYMPTOMS AND DIAGNOSIS

A typical case of sinus thrombosis presents little or no difficulty of diagnosis when accompanied by the classical symptoms of intermittent fever with chills, profuse perspiration, marked leucocytosis with a high polynuclear count, positive blood culture, metastatic abscesses, an ashen gray pallor or subicteric color, and extreme prostration. However, were we to await for the appearance of even a majority of these symptoms, many more of our patients would be beyond recall.

Striking fluctuation of the temperature curve is a cardinal symptom of sinus thrombosis. From a previously low level, it may rise to from 104° F. to 106° F., returning to normal or thereabouts in from twelve to twenty-four hours. Again the temperature may remain at high level for several days, then as sepsis is more in evidence, the periodic remissions and elevations of temperature occur at fairly regular intervals. The temperature may not exceed 101° F. to 102° F., as in a case reported by Baum.¹⁰

The pulse is elevated in proportion to the temperature unless affected by cerebral complications, or by irritation of the vagus.

Chills vary remarkably from the presence of a chilly sensation to rigors of several minutes' duration.

Profuse sweating is quite consistent

in advanced cases, and frequently is associated with declining temperature.

Vomiting is not a constant symptom. That of the cerebral type may be at times present, though in uncomplicated cases it is ascribed to labyrinthine irritation.

The sensorium is usually unaffected until late in the disease, then mental lethargy and drowsiness are obvious. One of the striking features of an early thrombosis case is the apparent well-being of a patient having a temperature of from 105° F. to 107° F.

Headache is not a constant symptom. It may be present during the height of a febrile attack, subsiding with the decline of temperature, thus differing much from the excruciating and progressive type observed in meningitis.

Metastatic abscesses are of frequent occurrence. According to Brüger, these are present in 42% of cases. The lungs, pleuræ, abdominal viscera, joints and superficial tissues are sites of usual election. It is a well-recognized clinical observation that cases presenting metastasis in the joints and superficial tissues are more apt to survive.

LOCAL SYMPTOMS.

Pain is the most constant and characteristic local sign, at times radiating to the parietal, occipital and cervical regions. One cannot too emphatically call attention to the fact that in sinus thrombosis developing subsequent to chronic suppurative otitis media, pain may be entirely absent. Tenderness over the area of the mastoid emissary vein is said to be more indicative of a perisinous abscess, though it is often

associated with sinus thrombosis. Late jugular thrombosis manifests itself by pain, swelling and muscular rigidity on the involved side.

Changes in the fundus oculi vary from dilatation of the retinal vessels, blurring of the disk margins, to marked papilloedema and choked disks. White's¹¹ series demonstrated these changes in 40% of the cases. Three cases of choked disks associated with perisinous abscess have been reported by Lillie.¹²

In the cases of short duration one must exclude pneumonia, typhoid, malaria, erysipelas, and in children digestive disturbances and the exanthems.

Thus, a patient with acute or chronic suppurative middle ear disease, presenting a high temperature, localized pain, a marked leucocytosis with a high polynuclear percentage, other classical symptoms and findings being for the time absent, we are justified in the conclusion that the disease process has extended beyond the confines of the mastoid cavity. A positive blood culture is of inestimable value, and is our "sheet anchor" in the diagnosis of atypical cases.

At times, one may be at a loss in the diagnosis of sinus thrombosis, even after exposing the vessel wall. The sinus wall and its bony covering are to all appearances normal. Exploration of the sinus must be attempted. Especially does this apply to infection by the hemolytic streptococcus.

The technic devised by Tobey and Ayer,¹³ of recording spinal fluid pres-

sure by manometric readings, is of interest. A lumbar puncture is performed and the spinal fluid pressure is recorded. Compression of the jugular vein normally causes a rise in pressure of 50 to 100 mm. When thrombosis is present, pressure on the jugular of the involved side produces no rise at all, or a slow rise of 10 to 20 mm. Pressure over the opposite or normal side produces a rise of two or three times the initial reading. This technic, if verified by further observation, should be indispensable in arriving at a diagnosis of sinus thrombosis.

PROGNOSIS.

The chances of recovery are quite proportional to the timeliness of adequate surgical intervention. Cases complicated by pulmonary and abdominal metastases have a very high mortality. The individual resistance of the patient and the type of organism present must ever be borne in mind. Gleason is of the opinion that if a week or more has elapsed the patient will recover.

TREATMENT.

The treatment of an otogenous septicemia is entirely surgical. Prophylaxis, in the cases of acute mastoiditis, consists in the performance of a simple mastoid operation that has not been too long delayed. The cases of chronic suppurative middle ear disease should have a radical mastoid operation performed when this procedure, according to modern otological precepts, is indicated. Beyond a shadow of doubt, these above-mentioned pro-

cedures have prevented many a case of sinus thrombosis and its disastrous sequelae.

Positive clinical and laboratory diagnosis having been established, undue conservatism has no place in the treatment of so grave a condition.

Continued entrance into the circulation of septic material should be prevented by jugular ligation, preferably above the facial vein. If the wall of the jugular vein presents a phlebitis, or moreover a thrombosis, it should be resected. The literature presents but few contributions (Dixon,¹⁴ Gleason and others) which are derogatory to this time-honored procedure.

The persistence of pyemic symptoms after operation on the sinus may be ascribed to failure or inability to remove all of the thrombus, or to the development of metastatic lesions which have not as yet manifested their location. Marked improvement often follows blood transfusions, and should be

repeated if the hemoglobin percentage is still low.

Intravenous administration of mercurochrome has been beneficial in some cases, as has also polyvalent antistreptococcic serum. General supportive treatment is to be employed, and I believe forced fluids of fruit juices are helpful.

CONCLUSIONS.

1. Severe blood stream infection may take place in a short space of time when the hemolytic streptococcus is the offending organism.

2. The atypical cases must be borne in mind.

Timely operation on a suppurative mastoid process will prevent a number of these cases. This calls for unusual care and circumspection on the part of the family physician, who is usually the first to observe a case of otitis media during the period of its initial development.

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*ROENTGENOLOGICAL ASPECTS OF SOME INTRATHORACIC LESIONS

By FORREST B. AMES, A. B., M. D., Roentgenologist,
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INTRODUCTION

It has been said that "the history of Roentgen therapy can be divided roughly into three eras, optimistic, pessimistic and realistic. At first enthusiasm and carelessness overcame caution. Work was done without scientific thought. Not only were patients injured, but also operators who by repeatedly testing the penetrability of the rays with their hands, developed an erythema which in many instances led to serious sequelæ.¹ This era lasted for eleven years, and voluminous literature and misleading case reports were in a fair way to produce "radiomaniaes" and deceive the credulous public.

Finally, when it was realized that the Roentgen ray was not a "cure-all," a season of pessimism seized the lay public and the medical profession, and for the next six years the sane future of Roentgen therapy rested in the hands of a few scientifically inclined Roentgenologists, who recognized both the advantages and limitations of the Roentgen ray, and saw, also, the necessity for standardizing the work and devising accurate methods of measurements.

As a result of these years of optimism over a new medical discovery, and pessimism because this discovery, like all things human, had its limitations, Roentgenology progressed logically to the era of realism in which we now are,

and Roentgen therapy has taken its rightful place in the field of scientific medicine as no cure-all, but a necessary therapeutic measure, specific in some superficial skin lesions, helpful in others, and to be considered in a vast number of lesions which need help for eradication.

I have dwelt at some length on the situations through which Roentgen therapy has passed, because it reflects, in some measure, the history of diagnosis by aid of the Roentgen ray. Not quite analogous are the two fields in development, for it seems to me that in diagnosis we have had a composite situation, with the lay public in the optimistic frame of mind thinking the Roentgen ray an all-seeing eye looking into the human body and forthwith discovering the source of all discomforts; a few not fully informed physicians in the mood of pessimism because their own feeble efforts have not been covered by the Roentgen examination and the diagnosis handed to them in the report of the Roentgenologist; and the majority of the more intelligent laity and physicians realizing that here, again, is an agent of diagnosis wonderfully exact at times and a help nearly always if only for a negative finding. I feel convinced that the misguided optimists, uninformed pessimists, and loyal and

*Read before the annual meeting of the Maine Medical Association at Portland, Me., June, 1927.

progressive realists can all be brought to one plane of understanding if, from time to time, certain facts and cases can be put forward as a matter of education.

I have in mind two thoughts for your consideration. The first of these has to do with the importance of closer co-operation between the clinician and Roentgenologist, in order that no clinical fact in a given case may be omitted when consideration is given to the Roentgenogram. The second deals with the importance of serial studies, allowing the time element to point the way of progress either toward repair or disintegration and hence furnish a guide for logical therapeutic measures.

As a vehicle for these thoughts, I wish to present the Roentgenological aspects of some intrathoracic lesions. I have chosen this part of the body for two reasons, first, to collaborate to some extent with the work of Dr. Johnson and his bronchoscopy clinic, and second, because "in no branch of medicine has the clinical application of the Roentgen ray yielded more gratifying results than in diseases of the chest. It has effected a revolution in thoracic diagnosis, and, when properly employed, has eliminated much of the uncertainty inherent in the older methods of examination."²

In order to lessen the volume of this paper I will omit discussion of conditions quite easily amenable to other means of clinical diagnosis. I will omit classification by age groups and enumerate a rather informal list of intrathoracic lesions, the diagnosis of which is either made entirely by Roent-

gen ray or else the Roentgen ray clarifies the clinical findings.

THE PLEURA

The Roentgen diagnosis of diseases of the pleura depends on two types of findings, first, the direct evidence of variable densities, and second, secondary manifestations as shown by changes in contour and position of the intrathoracic organs.

Dry pleurisy is a very difficult condition to demonstrate on the film, as the thin, inflammatory reaction is too readily permeable to the ray to show as any density.

Pleural effusions, on the other hand, lend themselves readily to demonstration. When free fluid is present there is a characteristic obliteration of the costo-phrenic sinus on the affected side and a rise into the axilla of the area of density. In the presence of expanded lung free effusions change position very slowly; but if pneumothorax is present, a fluid level, changing with posture, is a graphic sign of the pathology present.

Early stages of purulent effusions are of interest, as they may show before the clinical picture has advanced to a point of diagnosis. The fibrino-purulent exudate overlying the visceral pleura may be of sufficient density to cause slight retraction of the lung surface and a narrow band of density along the axillary border. As the exudate increases the fluid seeks the lowest levels, unless encapsulated, and is then more easily detected as such.

Encapsulated fluids offer more prob-

lems to the clinician, and it is here that we need to emphasize the importance of close co-operative observation on the part of the clinician and Roentgenologist. Here, too, enters the time factor, as a single examination is often not enough to completely solve the diagnostic problem. Repeated examinations at intervals of one to three or four days are often necessary to make clear the diagnosis and point the way to the proper treatment and ultimate prognosis.

Superficial encapsulated effusions are the commonest variety. These are usually secondary to pneumonia or cortical abscesses. They differ from free fluid in their Roentgen appearance by lacking an upward axillary curve and by being present and apparently held in any part of the pleural cavity, either base, mid-portion or apex. Multiple effusions may be present and divide the lung into irregular sub-divisions of differing density.

Clinical signs are often conflicting, and Roentgenograms, taken from different angles and with the patient in varying positions, serve as a guide to operative procedures of drainage.

Secondary signs of fluid in the chest have to do with the nature and location of the pathology. There may be or may not be displacement of the heart and great vessels, depending on the amount of fluid, the presence or absence of pleural and pericardial adhesions and the condition of the lung underlying the collection of fluid. Most of these questions can be accurately answered by a consideration of the his-

tory, clinical findings and studies of the lung fields over a period of time.

LUNG ABSCESS

It is my purpose to pass by such diseases of the lung parenchyma as tuberculosis, pneumonia and malignant infiltration. In this particular anatomical unit I will mention but one condition in which the Roentgen-ray study plays an important part. This condition is lung suppuration, or lung abscess.

Of all the possible causes of lung abscess probably the post-operative development is of greatest interest to the clinician, as it is one of the most common types which we encounter.

Given a case of operation about the nose and throat, probably a tonsillectomy, apparently normal convalescence for several days, and then³ a sudden rise in temperature and development of cough, the Roentgenogram of the chest will serve well to point out a focus of pathology in the lungs. The bit of infected material, lodged in a bronchus, or in a vessel producing a septic thrombus, quickly sets up a surrounding pneumonia and the density thus brought about can usually be demonstrated.

From the point of pneumonic infiltration, two paths are open to the lesion—either absorption and primary healing or progression to localized necrosis and development of an abscess cavity. If the first obtains, then the serial study of the lung fields shows gradual retrogression of the density to clearing of the whole picture: if pro-

gression to abscess cavity, we find first the abscess with a fluid level, surrounded by more or less pneumonia, and later a changing picture of fibrosis as the abscess walls collapse and connective tissue healing takes place.

It is of great interest and clinical value to make repeated examinations at time intervals, in order to definitely show the course of the lesion in relation to clinical cure. The burden of proof often falls on the Roentgenologist when the patient seems to be gaining clinically rather slowly.

THE BRONCHI

Progressing in our study, let us consider one of the most important fields of pulmonary diagnosis—the bronchi. The trend of practical diagnostic methods to-day is toward *seeing*, as a surer way to accuracy than the older methods of secondary findings and inference. Study of the bronchi is no exception, and bronchoscopic examination is rapidly reaching the plane of an exact science. Co-operation here between the Roentgenologist and the endoscopist brings much better results than have been possible before. Certain general statements may show the point.

Foreign bodies in the bronchi have long been dreaded events in the work of general practitioners. Now we are reaching greater exactness, both in diagnosis and treatment. Careful histories are often of little avail, for no parent can watch a child so closely that all swallowed articles are known. The Roentgenogram here is of inestimable value. If the object is radiopaque the task of localization is comparatively

easy, and the work of the bronchoscopist is rendered more accurate.

It is in the localization of non-opaque bodies that the Roentgen ray offers even greater help to the clinician. If a non-opaque object completely occludes a bronchus, we soon have deficient aeration of the lung tissue supplied by this stenosed bronchus, with resulting atelectasis, and hence increased density on the Roentgen film. Limitation of motion of the diaphragm on the side of the occlusion, and sometimes displacement of the heart to the affected side by compensatory expansion of the normal lung, serve as guides for clinical procedure.

It has been true oftentimes in the past, that no effort has been made to send patients for radiographic study, due to a mistaken idea on the part of the attending physician that only opaque bodies could be shown. Better co-operation between clinician and Roentgenologist may serve to overcome this erroneous idea and possibly save lives.

Another lesion of the bronchi where progress in methods of study has been made is that of bronchiectasis. Before the introduction of the use of iodized oil to fill and outline dilated bronchi we were dependent on plain Roentgenograms for information, and these methods did not always avail. The present status of the use of iodized oil injections followed by Roentgen-ray study has recently been summed up by Hartung,⁴ as follows:

1. Iodized oil is an ideal contrast medium for use as an aid to Roentgen-

ologic diagnosis in intrathoracic lesions.

2. Its need is based on the fact that the Roentgen and clinical findings in many cases give no adequate information of the pathologic processes present without it.

3. The indications for its use are varied and numerous. From the Roentgen standpoint, all conditions in which information may be obtained by distending natural or acquired hollow areas may be advantageously investigated with it. From the clinical standpoint, cases in which the history, physical findings, laboratory and ordinary Roentgen examinations do not give an adequate diagnosis should be subjected to it.

4. Positive findings obtained with it have definite diagnostic value.

THE LUNG HILUS

Of late there has been considerable and somewhat forceful discussion between the clinician and Roentgenologist concerning the importance of the various densities shown on the Roentgenogram in the so-called root or hilus region. It was my good fortune to attend the meetings of the Massachusetts Medical Society last week, in Boston, and I can sum up for you the conclusions brought to the convention by Dr. W. Walter Wasson, of Denver, Colorado.⁵ Dr. Wasson showed numerous lantern slides to depict the normal lung hilus, and then, stressing the importance of serial study, traced the effects of various diseased conditions on the hilus as shown by changing densities on the Roentgenogram.

It was shown that the anatomical

location of the hilus structures, between the sternum and spine, and overlying the heart and great vessels, is against accurate diagnosis by the ordinary clinical methods of examination. Thus the Roentgen ray offers the most reliable measure for diagnosis, and can be used to show not only the presence of pathology, but sometimes also the type of disease present. This means much from the standpoint of prognosis, especially in children and in cases of tuberculous involvement.

OTHER INTRATHORACIC ORGANS

Concerning the Roentgenological diagnosis of pathology of other intrathoracic organs, I will be brief.

In the early days and months of life the enlarged thymus may cause symptoms of pressure and the diagnosis remain obscure until the Roentgenogram shows the characteristic superior mediastinal shadow. Providentially, the same means of diagnosis may be changed to a method of cure and the symptoms of pressure abated. Without careful co-operation, however, between the clinician and Roentgenologist the work of the latter may be in vain. I have in mind a case which came to our clinic with symptoms of obstructed respiration. The clinical picture was that of enlarged thymus: Roentgen examination confirmed the diagnosis and Roentgen therapy was instituted. Some clinical improvement was the result, and the patient was discharged without further study.

Nearly a year later the same patient was readmitted with the same clinical picture. Comparative Roentgenograms

were made and the thymic shadow previously noted was practically absent. This time a complete examination was made and endoscopy revealed a small papilloma of the larynx. This acted as a valve and interfered with proper expiratory movements. Partial excision was done under difficulty and some measure of relief obtained.

Sometimes the presence of substernal thyroid can be made out by Roentgen ray, and here, again, the same agent can be used therapeutically to alleviate distressing symptoms.

Of cardiac conditions I will make but brief mention, as the subject is big enough for a paper by itself. However, diagnosis of pathology of the heart and great vessels offers another opportunity for this same co-operation for which I am striving and offers a most valuable opportunity for progressive serial study of various phases.

Much is being made of the subject of periodic health examinations, and in connection with this I have heard but little of the use of the Roentgen ray to furnish a permanent record of certain pathological appearances, records which can be repeated as each examination comes due and comparative study made for evidence of changing intrathoracic lesions. I am told that Harvard University is to make such records of the chests of their students in order to watch progress throughout the college

course. The idea is scientifically sound, and its execution will add greatly to the value of any records made. I emphasize it for your consideration in medical practice.

(Demonstration of cases.)

SUMMARY

1. This paper has enumerated some intrathoracic lesions the diagnosis of which is either made entirely, or clarified, by use of the Roentgen ray.

2. Two points are stressed: First, the necessity for close co-operation between the clinician referring the case and the Roentgenologist who makes the study, and second, the great importance of more than one examination to show progress of pathology to greater severity or healing and to guide methods of treatment.

CONCLUSIONS

1. As a result of scientific work the use of the Roentgen ray in diagnosing intrathoracic lesions has reached an unquestioned place of value in clinical medicine.

2. Co-operation between clinician and Roentgenologist will render even more accurate diagnoses and point the way to more intelligent treatment of chest conditions.

3. The idea of a single Roentgen examination should be given up and diagnosis and therapeutic procedures based on serial studies.

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THE TREATMENT OF THE PATIENT WITH PNEUMONIA

By H. BROOKS.

The author emphasizes the fact that to all practical purposes the medical profession is still as helpless in the treatment of pneumonia as it was a quarter of a century ago.

Much, however, has been learned as to treatment of the pneumonia patient in contradistinction to treatment of the disease itself.

The most essential single object to be accomplished in the handling of these patients is rest, not only physical, but mental and emotional as well. Quiet surroundings are needed. Visitors should be excluded.

The patient should be allowed to select his own position in bed. Cough should be combated by codeine, morphine, or opium in another form. Bromides are also indicated when rest cannot be accomplished by physical means alone.

Where the cough is loose, it is probably physiological in intent and is best left alone. When dry and irritating, relief may be obtained by ammonium chloride or the iodides. In still other cases sedatives may be indicated.

Some cases do splendidly under the open-air treatment, others badly, especially those of influenzal origin. Persons from tropical countries cannot stand this treatment.

The room temperature should be low, except in cases of pneumonia following measles, scarlet fever or influenza and in old age, or in traumatic or debilitated cases.

Oxygen is very useful in cases suffering from cyanosis and in certain unexplained cases of dyspnea.

Most fatal cases of pneumonia terminate with a circulatory failure. The basic pathology in most cases of cardiac failure is a myocardial degeneration with a consequent giving way, a dilatation of that portion of the heart exposed to stress, in this disease the right heart. In young, healthy subjects preliminary digitalis therapy is not indicated unless signs of circulatory embarrassment appear. In adults and aged patients the preliminary use of digitalis may save the day. In some instances strophanthus, caffeine and strychnia give better results. Caffeine works admirably when the circulatory failure is associated with a nervous defect.

A method of treatment of associated crises of the pulmonary and cardiovascular systems is often seen in a properly timed venesection. This is particularly valuable in the early stages of the disease, when the pulmonary congestion, perhaps with edema, is especially critical.

The most satisfactory measures for relieving tympanites are pituitrin or adrenalin, singly or associated, camphor, caffeine and occasionally strychnine with enemas.

The most satisfactory of the less frequently observed renal insufficiency is usually along circulatory lines, but theosin, diuretin and caffeine are usually sufficient to re-establish kidney action.

Water, fruit juices and sugar solutions given in abundance are always beneficial. Sufficient alkali to hold the urine nearly at the amphoteric point is often advisable.

Delirium usually calls for the active exhibition of chloral, of the bromides, or for morphine, opium or codeine.

Diet is of little importance.

When the pneumonia patient becomes septic very little can be done.

The patient who recovers from pneumonia will not be completely back to his normal condition for perhaps six months.—*International Clinics, December, 1927.*

COUNTY NEWS AND NOTES

Penobscot County Medical Society

The February meeting of the Penobscot County Medical Society was held at the Bangor House, February 21st, Dr. C. M. Thomas presiding.

Minutes of the last meeting approved as read.

The application for membership of Dr. I. Theodor Griebel, of Charleston, was read and referred to the Board of Censors.

Drs. B. L. Bryant, A. W. Fellows and A. K. P. Smith were appointed a committee to draw resolutions on the death of Dr. Galen M. Woodcock.

Moved and seconded, that members who have been in practice fifty years or over be made honorary members and be exempt from payment of dues, otherwise retain all the privileges of active members, this motion to become effective at the end of this year. The members coming under this motion are Dr. W. E. Fellows, Bangor; Dr. W. L. Hunt, Bangor; Dr. G. B. Tibbetts, Bangor; Dr. H. D. Worth, Bangor.

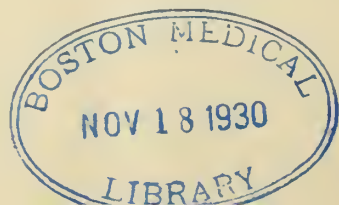
Dr. C. P. Thomas, of Brewer, was elected an honorary member in 1927.

Adjourned to the dining room and after dinner enjoyed a talk on "Treat-

ment and Diagnosis of Thyroid Enlargement," by Dr. H. M. Clute, of the Lahey Clinic, Boston, Mass.

There were forty-six present, as follows: Dr. H. M. Clute, Boston, Mass.; Dr. C. M. Thomas, Dr. A. J. Lethiecq, Dr. F. D. Weymouth, Brewer; Dr. L. H. Smith, Winterport; Dr. H. C. Knowlton, Hampden; Dr. H. C. Bundy, Milo; Dr. I. T. Griebel, Charleston; Dr. R. H. Marsh, Guilford; Dr. A. J. Bradbury, Dr. M. C. Madden, Old Town; Dr. R. L. Mitchell, Carmel; Dr. H. E. Snow, Bucksport; Dr. O. B. Humphrey, Dr. J. L. Johnson, Dr. H. W. Sampson, Dr. H. J. Hunt, Dr. L. S. Mason, Dr. E. S. Merrill, Dr. H. M. Goodwin, Dr. H. W. Johnson, Dr. H. L. Robinson, Dr. Barbara Hunt, Dr. A. W. Fellows, Dr. A. K. P. Smith, Dr. F. B. Ames, Dr. M. C. Moulton, Dr. J. B. Woods, Dr. J. F. Starrett, Dr. C. J. Hedin, Dr. W. E. Fellows, Dr. C. S. Philbrick, Dr. C. H. Burgess, Dr. W. S. Purinton, Dr. S. N. Marsh, Dr. H. W. Osgood, Dr. Daniel McCann, Dr. J. F. Cox, Dr. E. E. Brown, Dr. J. B. Thompson, Dr. B. L. Bryant, Dr. W. M. Emerson, Dr. E. L. Herlihy, Dr. A. E. Small, Dr. L. F. Wright, Dr. H. C. Scribner, Bangor.

H. C. SCRIBNER, *Secretary.*



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*OBSCURE OTO-LARYNGOLOGIC INFECTIONS IN INFANCY

By FREDERICK T. HILL, M. D., F. A. C. S., Professional Building, Waterville, Me.

As a student in medical school, I must confess that I showed very little aptitude for the study of pediatrics. However, my professor, Dr. Morse, was in the habit of emphasizing, over and over again, one point which became firmly impressed upon my memory and which has been of inestimable value to me ever since. This was, that in any case of unexplained fever in a child, always think of the ears and the kidneys. Since graduation, in a fairly active practice of otology, I have seen this maxim many times verified. Many times has the former of these, at least, proved to be the key to the diagnostic puzzle. All too frequently I have observed, when called in consultation, one or both of these important diagnostic points overlooked. This occurred even in my hospital days. An oft-recurring experience while house surgeon at the Massachusetts Eye and Ear Infirmary was to find that, on returning to the hospital in the evening, some little

patient in the nursery was reported as having a high temperature and crying with pain, but that my junior had seen the case and had ordered paragoric. Examination of the case—and this meant looking at both ears—usually resulted in changing the order from paragoric to paracentesis of the ear drum. Far too often in private practice have I had to witness the tragedy of an infant dying from an otitic meningitis in which the otitis media had not been even suspected until too late.

While we are living in an age of increasing specialism in medicine, this very limitation of our work to smaller fields calls for greater co-operation with our fellow practitioners. I believe it was Dr. Mayo who defined a specialist as one who knows more about less. In the whole realm of medicine there is no greater need for constant co-operation than between the pediatricist and the otolaryngologist. Each must depend upon the other to give that needed special

*President's address. Read at the annual meeting of the Kennebec County Medical Association, Augusta, Me., December 15, 1927.

skill which is his by right of diligent training and experience. The sick child usually presents a diagnostic problem, at best, unless, being lacking in a diagnostic conscience, one is content to attribute all the trouble to the gastrointestinal tract and routinely apply the universal panacea, *Ol. ricini*, with blind hope and faith in its eventual efficacy. And yet what class of patients is more deserving of the best diagnostic ability than the helpless children? The adult, if mistreated, can change his physician, or at least register a complaint; but the infant is forced to suffer, if not in silence, at least in unintelligible vocalism. Most of the profession realize the necessity for oto-laryngologic consultation in many cases of infant sickness, although sometimes this realization is not kept in mind and acted upon soon enough. And at the same time we must not forget that the oto-laryngologist has great need of the help of the pediatricist, if the case is to be managed successfully. It is with the hope of refreshing your minds with the idea of the importance of oto-laryngologic consultation when dealing with the sick child, that I am speaking to you this evening. That otitis media is a frequent disease of infancy is generally recognized, but that a primary infection in the tympanum, or mastoid, or in the paranasal sinuses, may cause marked systemic disturbance, to the seeming obliteration of the oto-laryngologic picture, is not so well known.

Literature, at least that of fairly recent vintage, has been rich in references to this subject. Hartmann, in 1894,

considered the question of intestinal disturbances in otitis media in infants. Post-mortem observations of Preysing, Ponfick and Heermann, in Germany, showed pathology and bacterial infection of the middle ear, and in many cases of the mastoid, in 90% of the infants who died from any cause whatever. But it is to Dean, of our own country, that belongs the credit for bringing to our minds the realization of the frequency of oto-laryngologic complications in infancy and their importance. His work will stand out for all time. In fact, he has covered this subject so thoroughly that anything further said seems simply quoting from his several monographs. Indeed, he has stressed this matter so hard that there has been a feeling among some members of the profession that he was over-emphasizing it. Other men have reported not finding these conditions to the extent that Dean has. There is a possibility that the climatic conditions in Iowa, where Dean has done his work, might be responsible, in part, at least, for a more virulent type of otitic and sinus infection than is commonly seen in the East. However, there is no doubt but what there are sufficient of these complications to warrant our gravest attention, many of which are overlooked.

Alden and Lyman found suppuration of the middle ear in seventy consecutive autopsies on infants dying from athrepsia and infantile diarrhea, only thirty of which had been diagnosed during life. Marriott called attention to the fact that in infants with diar-

rhea, fever and toxic symptoms there was not an intoxication due to some certain food element, but that it was a toxemia of infectious character. Autopsies on these cases showed no lesions in the gastro-intestinal tracts, but purulent material with hemolytic streptococci were found in the mastoids in a large majority.

Of course in infants the history usually obtained from the parents is quite unreliable, and we should also remember that pain is not necessarily present in acute otitis. This erroneous idea, too prevalent with the family physician, is perhaps the greatest reason for overlooking many of these cases. Food refusal, malnutrition and loss of weight may be due to an otitis media, or an infected sinus. In other words, we must grasp the idea that in many of the disorders of infancy the disease is primarily in the ears, or sinuses, or both, and that the gastro-intestinal symptoms are merely complications of this disease.

Dean considers that the most important complication of otitis media in infancy is the so-called "cholera infantum syndrome." This is a condition characterized by malnutrition, diarrhea, anhydremia, fever, loss of weight, and oftentimes severe prostration with syncope and fatal termination. This condition has been mentioned by several pediatricians, including Jeans, Floyd, Byfield and others. Jeans observed that this condition might be due to either mastoiditis or sinusitis, and that the symptoms might be relieved promptly by measures looking to free drainage from the site of infection. Dean says

that he has not seen cases of cholera infantum in which there was not infection of the upper respiratory tract.

The etiology of these disorders is not well understood, although some quite definite observations have been made at the Iowa University Hospital. Lierle has summed these up something as follows:

Middle ear and mastoid infections are apparently secondary to infection in the nose and throat. Most of the cases show paranasal sinus disease. Most of the cases come from the Pediatric Out-patient Department and have been artificially fed. Only four cases were noted in breast-fed infants. (It is interesting to note in this connection, quoting Dr. Dean's remarks at a recent meeting of the Otological Society, that in Dr. Daniels' department of the hospital, where infants are under supervision practically from birth, there have been no such cases. It would seem from this that there might be a cause for these otitic infections in the lack of proper feeding and care of the infant.) The ages ranged from eighteen days to fifteen months. 92% showed a bilateral involvement. Spontaneous rupture of the drum occurred in only 12%. This is a point to bear in mind, as it emphasizes the importance of operative interference. Those cases showing the presence of hemolytic streptococcus, hemolytic staphylococcus albus and encapsulated streptococcus were the most severe.

The closest co-operation between the pediatricist and the oto-laryngologist is essential for the successful management

of these cases. Often one examination of the ears, or sinuses, is not sufficient. Conditions may change from day to day, and frequently the indication for operative interference depends more upon the general condition of the child than on the otologic picture. Both the otologist and the pediatricist should see the child together daily until the course of procedure becomes obvious.

The general picture of the typical case is usually quite definite, although we may see many variations of this in practice in our localities. The onset is usually sudden. The infant is very ill. There is marked dehydration in a short space of time. There is a marked paleness, the lips are cyanotic and respiration may be difficult. There is marked loss of weight quite rapidly. There is usually a high fever, although this may be absent. There may be from eight to twenty stools a day, and these are foul, green and slimy. There is food refusal, and often nausea and vomiting. White blood count will show from 10,000 to 40,000, with a high polymorphonuclear percentage. There is an appearance, described by Jeans and Floyd, as one of intoxication, characterized by drowsiness or stupor, and grayish pallor, coming on with or following fever.

Sometimes we will find the typical picture of an acute otitis media on examination of the ears, with a red and bulging drumhead. Frequently, however, this textbook picture will be missing, and the condition can be diagnosed only with difficulty, requiring skill and experience. Any deviation from the

normal may be of utmost significance. The light reflex may be absent, or instead of the normal luster of the drum, it may be dull gray, white or a dirty yellow. The long process may seem shortened, or the short process less prominent. There may be no bulging or redness at all. The condition of the superior-posterior canal wall is most important, as any sagging here is indicative of suppuration within the mastoid antrum. Careful examination is essential, as sometimes rough use of the speculum may traumatize the tender canal wall and cause it to appear red and bulging to a subsequent observer. Examination of the nose will reveal pus in the ethmoid region in most cases, while if the antra should be aspirated, they would probably be found to contain pus.

The prognosis depends largely upon how early in the course of the disease the condition is recognized and proper treatment instituted, although, of course, the virulence of the infection, as well as the resistance of the patient, plays a big part.

In this class of case the treatment depends to a great extent upon the general condition of the little patient. The otologist must be guided by the pediatricist. Of course, as soon as a diagnosis of otitis media is made, the membrana tympani should be incised. A good free incision, preferably extending in a right angle from the inferior portion upwards in the posterior region, so as to afford sufficient drainage, should be made. The obsolete puncture should not be thought of.

There may be a tendency for this incision to close and it may be necessary to reopen several times. Sometimes the decision to incise the drum will depend largely upon the general condition of the patient. The drum may appear practically normal, yet it be obvious that there is something probably in the tympanum, or mastoid, to account for the trouble. There may have been an otitis media which is now resolving. Incision may not reveal any pus, or even serum, but frequently one will find it in quite profuse amounts a few hours after incision. This may be all that is necessary. To my way of thinking, whatever form of after-treatment, as regards the ear, is carried on, matters little. I have practically discarded irrigations. The less the infant is disturbed, provided free drainage is maintained, the better.

Frequently something more will be required. After a middle ear infection has resolved there may still be pus in the mastoid antrum, and sometimes this is so located that there is little possibility of draining it through an incision in the drum. Pus may be walled off in the epitympanic spaces. Lyman has shown that the various folds of mucous membrane in the middle ear result from the absorption of the mesodermal tissue found at birth. This process begins in the lower portion of the tympanum, and by the eighth week the lower and middle parts have formed a distinct cavity, but the upper, or epitympanic portion, is not free of this tissue until the first or second year. If, then, the process is confined to the lower portion of the mid-

dle ear, incision will afford sufficient drainage, but with an invasion of this epitympanic space, this will not be adequate. In these cases mastoidectomy will be required. Again the decision will depend largely upon the general condition of the patient. Usually, if there is no improvement forty-eight hours after incision of the drum, provided the drainage is free and maintained, it is well to perform the mastoid operation. It should be needless to say that this should be done very rapidly and under the lightest of anesthesia. Five minutes should be the limit, as these patients are not good surgical risks. It is also essential that the operation be complete and thorough, not simply opening the antrum. The old teaching, that the mastoid of the infant consisted simply of the antrum and little else, is usually wrong. Pneumatization of the mastoid is frequently well marked, especially in the zygomatic region. Dean reports a case where, despite mastoid operation, the child died, and autopsy revealed one mastoid cell filled with pus which had been overlooked. After operation the child should still be under the same careful supervision of both the pediatricist and the otologist as before. If only one mastoid has been involved there is always the possibility of the other becoming infected, while we must not lose sight of the paranasal sinuses.

While paranasal sinus infection is present in most of the cases, and is perhaps the forerunner of the otitis media, it is not, as a rule, such a terminal factor. It may produce the same systemic

disturbances, but usually to a less degree. It is a condition, however, which is much more frequently overlooked than even otitis media, both in infants and in older children, for it is of commoner occurrence than generally supposed. Many a properly performed tonsil and adenoid operation fails of success because of neglect to recognize some infection of the sinuses. Sinus infection should be actively treated from the very beginning. Oftentimes conservative measures will suffice, especially if the child is upon the proper feeding. Ephidrin, either the sulphate or the chloride, 2% or 3%, sprayed in the nose and followed in fifteen minutes by 5% argyrol solution, every two or three hours, is very effective in maintaining drainage. Removal of the adenoids, and in certain cases of older children, the tonsils, may be necessary. Sometimes operative interference upon the antra is required. Opening is made with a rasp through the inferior meatus, below the inferior turbinate, and the contents of the antrum aspirated. Sometimes a self-retaining rubber drainage tube is left in situ, to permit subsequent aspirations. Again the lightest of anesthesia is required. Dean advocates the use of ethylene for this. Personally I have not used it and can say nothing about it.

While it will be easily recognized that the clinical picture here described is a most serious one, these cases will generally recover provided the causative focus, whether in the ears or the sinuses, has been diagnosed in time

and proper treatment instituted. The temperature will return to normal, there will be a cessation of the diarrhea, the baby will take its feeding and there will be a gain in weight, something quite worthy of the diagnostic trouble.

I have purposely stressed the need of oto-laryngologic co-operation in these so-called cholera infantum cases, because I feel that there is a distinct need for so doing. These are the cases where the gastro-intestinal phase so occupies the attention of the physician that the necessity of ascertaining the real underlying cause in the ears, or the sinuses, is far too frequently lost sight of. I realize that, to some, I may be describing acidosis. These cases will show acetone in the urine, naturally, as there is food refusal. But let us not fool ourselves with the idea that bicarbonate of soda will effect any cure. I do not wish to enter into any discussion of acidosis, but I do feel that many cases in infants which are diagnosed as such are actually the type of case I have here described. Acidosis, like the mantle of charity, covers a multitude of sins, and I think that we will be doing a greater service to these little patients if we strive to find the focus of infection, so frequently right before our eyes, in the upper respiratory tract, rather than resting in smug content at the finding of acetone in the urine.

It goes without saying that any case of unexplained disturbance in an infant should have the benefit of oto-laryngologic examination. And, oh, how that term "unexplained" may be abused!

How easy to explain any condition to suit our own preconceived ideas. The utmost diagnostic skill, with all the aids of the laboratory, should be most conscientiously employed before we are ready to finally arrive at a diagnosis which will really explain, and at the same time promise a successful outcome, if possible. Pain, fever and the systemic disturbances already mentioned, all, or any of these, generally call for an examination of the ears and sinuses in children, for it is only by such examination, careful and thorough, and sometimes repeated, that these can be excluded. The diseases of infancy and childhood, the nutritional and the exanthemata all furnish rich and fertile fields for oto-laryngologic disorders. A little more attention to this point on the part of the family physician will give us a better and healthier coming generation.

CONCLUSIONS.

1. In all cases of unexplained disturbance in infants the possibility of an oto-laryngologic disease should not be overlooked.
2. Pain is not a necessary symptom of otitis media.
3. Otitis media, or sinus infection, in infants may produce gastro-intestinal disturbances, known as the cholera infantum syndrome.
4. The clinical picture of otitis media in infants is often misleading and the pathology may be diagnosed only with difficulty.
5. Paranasal sinus disease is commoner than generally realized in children.
6. Early attention in these cases is imperative for a good prognosis.
7. The closest co-operation between the pediatricist and the oto-laryngologist is necessary.

REFERENCES.

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WANTED—We have several well-trained practical laboratory technicians with additional training in physiotherapy graduating from our school of public health May 15. Physicians, hospitals, clinics and health departments desiring such service can secure it by writing immediately.

Address, Dr. L. H. South, Director Bureau Bacteriology, Kentucky State Board of Health, 532 West Main Street, Louisville, Ky.

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Address, Mrs. John T. Palmer, 306 Congress Street, Portland, Maine.

CONSTITUTION AND BY-LAWS, MAINE MEDICAL ASSOCIATION

At the last Annual Session of the Maine Medical Association, held in Portland, a committee of three was appointed to revise the Constitution and By-Laws of this Association, and to report at the next Annual Session for adoption.

According to the present Constitution and By-Laws, the publication of this amendment in the Journal two months before the Annual Session permits final action to be taken at the following session.

Your committee has made a general revision of the whole Constitution and By-Laws, according to the recent Constitution and By-Laws provided by the American Medical Association, and publishes below the result of its work.

HERBERT F. TWITCHELL, *President*,
FRANK Y. GILBERT, *President-Elect*,
BERTRAM L. BRYANT, *Secretary*.

CONSTITUTION

ARTICLE I

Name of the Association

The name and title of this organization shall be the Maine Medical Association.

ARTICLE II

Purpose

The purposes of this Association are to promote the science and art of medicine, the protection of public health, and the betterment of the medical profession; and to unite with similar organizations in other States and Territories of the United States to form the American Medical Association.

ARTICLE III

Component Societies

Component Societies shall consist of those county medical societies which hold charters from this Association.

ARTICLE IV

Composition of the Association

This Association shall consist of members who shall be the members of the component county medical societies who have been certified to the headquarters of this Association, and whose dues and assessments for the current year have been received by the Secretary.

When recommended by his County Society, any member of good standing who has completed fifty years of active practice, by a vote of the House of Delegates, may become an Honorary Member of the Association without further payment of dues and without loss of any of his former privileges.

ARTICLE V

House of Delegates

The House of Delegates shall be the legislative body of the Association, and shall consist (1) of delegates elected by the component county societies, and (2) the officers of the Association enumerated in Section 1, of Article IX, of this Constitution.

ARTICLE VI

Council

The Council shall be the Board of Trustees of this Association. It shall consist of the Councilors, the President, the President-Elect, the Secretary-Treasurer of the Association. Four of its members shall constitute a quorum.

ARTICLE VII

Sections and District Societies

The House of Delegates may provide for a division of the scientific work of the Association into appropriate sections and for the organization of such Councilor District Societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

ARTICLE VIII

Sessions and Meetings

SECTION 1. The Association shall hold an annual session during which there shall be at least two general meetings, open to all registered members, delegates and guests.

SEC. 2. The time and place for holding each annual session shall be fixed by the House of Delegates, or such authority may be delegated to the Council.

SEC. 3. Special meetings of either the Association or the House of Delegates may be called by a two-thirds vote of the Council or upon petition by ten members.

ARTICLE IX

Officers

SECTION 1. The officers of this Association shall be a President, a President-Elect, a Secretary-Treasurer, and six Councilors.

SEC. 2. The officers, except the Councilors, shall be elected annually. The terms of the Councilors shall be for three years; one-third the members of the Council shall be elected each year. The Secretary-Treasurer shall be elected by the Council. All these officers shall serve until their successors are elected and installed.

ARTICLE X

Funds and Expenses

Funds shall be raised by an equal per capita assessment on each component society. The amount of the assessment shall be fixed by the House of Delegates. Funds may also be raised by voluntary contributions, from the Association's publications and in any other manner approved by the House of Delegates. The Council shall submit an annual budget to the House of Delegates. All resolutions providing for appropriations shall be referred to the Council and all appropriations approved by the Council shall be included in the annual budget.

ARTICLE XI

Referendum

At any general meeting of the Association it may, by a two-thirds vote, order a general referendum upon any question pending before the House of Delegates. The House of

Delegates may, by a vote of its members, submit any question to the membership of the Association for its vote. A majority vote of all the members of the Association shall determine the question.

ARTICLE XII

Seal

The Association shall have a common seal. The power to change or renew the seal shall rest with the House of Delegates.

ARTICLE XIII

Amendments

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the Delegates present at any Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been published during the year in the bulletin or journal of this Association, or sent officially to each component society at least two months before the meeting at which final action is to be taken.

BY-LAWS

CHAPTER I

Membership

SECTION 1. The name of a physician on the official roster of this Association, after it has been properly reported by the secretary of his county society, shall be prima facie evidence of membership and of his right to register at the Annual Session.

SEC. 2. No person who is under sentence of suspension or expulsion from any component society of this Association, or whose name has been dropped from its roll of members, shall be entitled to any of the rights or benefits of this Association.

SEC. 3. Each member in attendance at the Annual Session shall register, when his right to membership has been verified by reference to the records of this Association. No member shall take any part in any of the proceedings of the Annual Session until he has complied with the provisions of this Section of the By-Laws.

CHAPTER II

General Meetings

SECTION 1. The General Meetings shall be open to all registered members and guests. Before them, at such time as may have been arranged, shall be delivered the annual addresses of the President, and the annual orations.

SEC. 2. No address or paper, except those of the President, and the annual orations, shall occupy more than twenty minutes in its delivery. No member, except by unanimous consent, shall speak more than once in the discussion of any paper nor longer than five minutes at any one time.

SEC. 3. All papers read before this Association shall be its property. Each paper, when it has been read, shall be deposited with the Secretary. Authors of papers read before this Association shall not cause them to be published elsewhere until after they have been published in its Journal.

CHAPTER III

House of Delegates

SECTION 1. The House of Delegates shall meet annually at the time and place of the Annual Session.

SEC. 2. Each component county society shall be entitled to send each year one delegate or one corresponding alternate to the House of Delegates for each twenty-five (25) full paid members or fraction thereof in this Association; provided, however, that each county society shall be entitled to at least one delegate or one corresponding alternate.

SEC. 3. Ten delegates shall constitute a quorum of the House of Delegates. All meetings of the House of Delegates shall be open to members of the Association.

SEC. 4. From among the members of the House of Delegates, the President-Elect, for the purpose of expediting proceedings, shall appoint reference committees to which report and resolutions shall be referred.

SEC. 5. The House of Delegates shall elect delegates to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

SEC. 6. The House of Delegates shall divide the State into Councilor Districts, specifying what counties each district shall

include, and, when the best interest of the Association and profession will be promoted thereby, organize in each a district medical society, of which all members of the component county societies shall be members.

SEC. 7. The House of Delegates shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates. Such committees shall report to the House of Delegates, and may be present and participate in the debate on their reports.

SEC. 8. The House of Delegates shall approve an annual budget of expense to be submitted to it by the Council.

SEC. 9. It shall approve all memorials and resolutions issued in the name of the Association before they shall become effective.

CHAPTER IV

Election of Officers

SECTION 1. The President-Elect, as Speaker of the House of Delegates, on the first day of the Annual Session shall appoint a committee on nominations consisting of six delegates, one from each councilor district. The committee on nominations shall report the results of its deliberations to the House of Delegates in the form of a ticket, one member for each of the offices to be filled at that Annual Session, including members of the standing committees and delegates not otherwise provided for. Each candidate for councilor must be a resident of the district for which he is nominated.

SEC. 2. The report of the nominating committee and the election of officers shall be the first order of business of the House of Delegates at the second meeting of the House.

SEC. 3. All elections of officers shall be by ballot and the majority of votes cast shall be necessary to elect.

SEC. 4. Nothing in this chapter shall be construed to prevent additional nominations being made from the floor by members of the House of Delegates.

SEC. 5. No person known to have solicited votes for or sought any office within the gift of this Association shall be eligible for any office for two years.

SEC. 6. Delegates shall not be eligible for election to any of the offices named in the Constitution, except that of Councilor.

SEC. 7. The election of President-Elect shall be by direct ballot in the general assembly of the Association on the afternoon of the second day of the Annual Session.

CHAPTER V

Duties of Officers

SECTION 1. The President shall preside at all meetings of the Association and shall appoint all committees not otherwise provided for; he shall deliver an annual address at such time as may be arranged, and shall perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the State during his term of office, and as far as practicable, shall visit, by appointment, the various sections of the State and assist the Councilors in building up the county societies, and in making their work more practical and useful.

SEC. 2. The President-Elect shall be a member of the Council and shall act for the President in his absence or disability. If the office of President should become vacant the President-Elect shall succeed to the presidency. He shall act as presiding officer at all sessions of the House of Delegates and shall give a deciding vote in the case of a tie. In case of death, resignation, absence, or removal, the duties of his office shall be performed by the Chairman of the Council until the next Annual Session, when both a President and a President-Elect shall be elected.

SEC. 3. The Secretary-Treasurer, as Secretary shall attend the General Meetings of the Association and the meetings of the House of Delegates, and shall keep minutes of their respective proceedings. He shall be Secretary of the Council. He shall be custodian of all record books and papers belonging to the Association. He shall provide for the registration of the members and delegates at the Annual Session. He shall, with the co-operation of the secretaries of the component societies, keep a card-index register of all the legal practitioners of the State by Counties, noting on each his status in relation to his county society, and shall transmit a copy of this list to the American

Medical Association, transmitting to its secretary each month a report containing the names of new members and the names of those dropped from the membership roster during the preceding month. He shall conduct the official correspondence, notifying members of meetings, officers of their election and committees of their appointment and duties. He shall employ such assistants as may be ordered by the Council and shall make an annual report to the House of Delegates. He shall supply all component societies with the necessary blanks for making their annual reports, and shall collect from them the regular per capita assessments. The amount of his salary shall be fixed by the Council.

SEC. 4. As Treasurer, he shall give a bond in the sum of \$2,000. He shall demand and receive all funds due the Association, together with bequests and donations. He shall pay money out of the Treasury only with the consent of the Council. He shall annually render an account of his doings and of the state of funds in his hands to the House of Delegates and submit his books to be audited by a committee of the Council.

CHAPTER VI

Council

SECTION 1. The Council shall meet on the day preceding the Annual Session, and daily during the Session and at such other times as necessity may require, subject to the call of the chairman or on petition of three Councilors. It shall meet on the last day of the Annual Session of the Association to organize. It shall make an annual report to the House of Delegates.

SEC. 2. Each Councilor shall be organizer, peacemaker and censor for his district. He shall visit each county in his district at least once a year for the purpose of organizing component societies where none exist, for inquiring into the condition of the profession, and to keep in touch with the activities of and to aid in the betterment of the component societies of his district. He shall make an annual report of his work, and of the condition of the profession of each county in his district at the Annual Session of the House of Delegates. The necessary traveling expenses incurred by each Councilor in the line of duties herein imposed may be

allowed on a proper itemized statement, but this shall not be construed to include his expense in attending the Annual Session of the Association.

SEC. 3. The Council shall be the executive body of the House of Delegates.

The Council shall be the Board of Censors of the Association. It shall consider all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Association. All questions of an ethical nature brought before the House of Delegates or the General Meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members of component societies, on which an appeal is taken from the decision of an individual Councilor. Its decisions in all cases, including questions regarding membership in this Association, shall be final.

SEC. 4. Charters shall be issued to county societies only on approval of the Council, and shall be signed by the President and Secretary of this Association. Upon the recommendation of the Council, the House of Delegates may revoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

SEC. 5. In sparsely settled sections the Council shall have authority to organize the physicians of two or more counties into societies, to be suitably designed so as to distinguish them from district societies, and these societies, when organized and chartered, shall be entitled to all rights and privileges provided for component societies until such counties shall be organized separately.

SEC. 6. The Council shall provide for and superintend the issuance of all publications of the Association, including proceedings, transactions and memoirs, and shall have authority to appoint an editor and such assistants as it deems necessary. It shall prescribe the methods of accounting and through a committee of three of its members, to be known as a Committee on Auditing and Appropriations, shall audit all accounts of this Association. The Council shall adopt an annual budget providing for the

necessary expenses of the Association, which shall be prepared and presented for its consideration by the Committee on Auditing and Appropriations at the first meeting of the Council in June of each year. It shall submit an annual report to the House of Delegates, which shall specify the character and cost of the publications of the Association, the amount and character of all its property, and shall provide full information concerning the management of all affairs of the Association which the Council is charged to administer.

SEC. 7. The Council shall appoint, at least six months before the annual meeting, a committee, consisting of three of its members, to be known as the Committee on Arrangements for the annual meeting. On recommendation of this Committee the Council shall appoint a general chairman of a local committee on arrangements, who shall be a member of the component society of the county in which the annual meeting is to be held, and who shall appoint and organize from the members of this county society the personnel of the local committee on arrangements. The local committee on arrangements shall provide suitable meeting places and shall have general charge of all local arrangements subject to the approval of the Committee on Arrangements for the annual meeting. All receipts accruing from the annual meeting shall be turned over to the Committee on Arrangements and all expenditures made by the committee in connection with the annual meeting must be authorized in advance by the Committee on Auditing and Appropriations. Immediately after the annual meeting the Committee on Arrangements shall forward to the Treasurer any accumulated balance. Any deficit created on account of the annual meeting shall be met by the Council on recommendation of the Committee on Auditing and Appropriations.

SEC. 8. The Council shall by appointment fill any vacancy in office not otherwise provided for which may occur during the interval between annual meetings of the House of Delegates; the appointee shall serve until his successor has been elected and has qualified.

SEC. 9. The Council may employ an Ex-

ecutive Secretary, who need not be a physician nor a member of the Association.

SEC. 10. The salaries of all employees of the Association shall be fixed by the Council.

SEC. 11. The Council shall provide such headquarters for the Association as may be required to conduct its business properly.

CHAPTER VII

Committees

SECTION 1. The standing committees of this Association shall be as follows:

A Committee on Scientific Work.

A Committee on Legislation.

A Committee on Medical Defense.

A Committee on Medical Education and Hospitals.

A Committee on Public Relations.

A Committee on Venereal Diseases.

A Committee on Cancer.

Unless otherwise provided in these By-Laws, each of these committees shall consist of three members, each of whom shall serve for a term of three years. One member of each of these committees shall be appointed annually by the House of Delegates, provided that at the Annual Session one member of each of the foregoing committees shall be appointed for a term of three years, one each for two years, and one each for one year.

SEC. 2. The Committee on Scientific Work shall consist of three members, of which the Secretary shall be one, and shall determine the character and scope of the scientific proceedings of the Association for each session, subject to the instructions of the House of Delegates. Thirty days previous to each Annual Session it shall prepare and issue a program announcing the order in which papers and discussions shall be presented.

SEC. 3. The Committee on Legislation shall consist of three members, and the President and the President-Elect. There shall be a joint meeting of this committee and an auxiliary committee, as provided for in Chapter XI, Section 10, of these By-Laws, held annually, as may be ordered on the call of the chairman or three members of the State Committee. The chairman of the State Committee, and in his absence, the President, shall act as chairman at the joint committee meetings. Under the direction of

the State Committee, the joint committee shall represent the Association in securing and enforcing legislation in the interest of public health and of scientific medicine.

SEC. 4. The Committee on Medical Defense shall consist of five members and the Secretary. With the consent of the Council a majority of the members of this committee shall be empowered to fill any vacancies that may occur upon their own committee. They shall prepare plans and establish rules for the defense of members of this Association against whom suits for alleged malpractice have been brought. It may assist in the defense of any member sued for alleged malpractice if the member was in good standing and had complied with the rules of the committee when the service on account of which the suit was brought was rendered. It may retain an attorney for the Association to handle these cases and fix the amount of the retainer, and may incur such expenses in the performance of its duties as may seem necessary, a final accounting to be made each year to the Council.

SEC. 5. The Committee on Medical Education and Hospitals shall serve in this State for the Council on Medical Education and Hospitals of the American Medical Association, and shall have referred to it all questions pertaining to hospitals and medical education.

SEC. 6. The Committee on Public Relations shall consist of five members, and shall have charge of all matters arising between the general public and the physicians, not provided for by other committees. It shall act, when requested, as a committee of arbitration in controversies arising between physicians and other parties in the administration of the Workman's Compensation Act. It shall act as an advisory committee for all health organizations doing work in the State. It shall investigate matters affecting the economic status of physicians and report annually to the House of Delegates such recommendations as it sees fit.

SEC. 7. The Committee on Venereal Diseases shall assist other health organizations in the education of the public in regard to venereal diseases.

SEC. 8. The Committee on Cancer shall assist the other health organizations in the

education of the public in regard to cancer.

SEC. 9. Delegates shall be appointed to attend the annual meetings of the New England States and the National Medical Council.

A Necrologist shall be appointed, whose duties shall be to report the deaths of physicians belonging to the Association.

SEC. 10. The Delegates to the New England Council shall consist of five members, the President, Secretary, and three others to be elected by the House of Delegates for a term of three years. One member to be elected annually. The apportionate part of the expenses to be paid by the Association.

SEC. 11. All reports of Officers, Committees, and Delegates shall be published the month preceding the Annual Session of the Association and these reports must be in the hands of the Secretary sixty days before the Annual Session.

CHAPTER VIII

Dues and Assessments

SECTION 1. The annual dues and assessments shall be determined by the House of Delegates, and shall be levied per capita on the members of the Association. They shall be payable on or before January 1, of the year for which they are levied. The Secretary of each component society shall cause to be collected and shall forward to the offices of the Association the dues and assessments for its members, together with such data as shall be required for a record of its officers and membership. Any member whose name has not been reported for enrollment and whose dues for the current year have not been remitted to the Secretary of this Association on or before April 1, shall stand suspended until his name is properly reported and his dues for the current year properly remitted.

SEC. 2. The record of payment of dues and assessments on file in the offices of the Association shall be final as to the fact of payment by a member and as to his right to participate in the business and proceedings of the Association and of the House of Delegates.

SEC. 3. Any county society which fails to make the reports required, at least thirty days before the Annual Session of the State Association, shall be held suspended, and

none of its members or delegates shall be permitted to participate in any of the proceedings of the Association or of the House of Delegates.

CHAPTER IX

The ethical principles governing the members of the American Medical Association shall govern members of this Association.

CHAPTER X

The deliberations of this Association shall be conducted in accordance with parliamentary usage as defined in Roberts' Rules of Order.

CHAPTER XI

SECTION 1. All county societies now in affiliation with the State Association or those that may hereafter be organized in this State, which have adopted principles of organization not in conflict with this Constitution and By-Laws shall, upon application to the Council, receive charters from this Association, provided that their Constitution and By-Laws shall have been submitted to the Council and received its approval.

SEC. 2. Only one component medical society shall be chartered in each county.

SEC. 3. Each county society shall judge of the qualifications of its members, subject to review and final decision by the Council of the State Association. Every reputable and legally qualified physician who does not practice, nor profess to practice sectarian medicine, and who is a bona-fide resident of the same county, shall be eligible for election to membership.

A member of a component society whose license has been revoked shall be dropped from membership automatically as of the date of revocation. The Council of the State Association shall have final authority to expel a member should a component society fail to do so after being so requested by the Council.

A physician living near a county line may hold his membership in that county most convenient for him to attend, on permission of the component society in whose jurisdiction he resides.

SEC. 4. Any physician who may feel aggrieved by the action of the society of his county in suspending or expelling him, shall

have the right to appeal to the Council, whose decision shall be final. A county society shall at all times be permitted to appeal or refer questions involving membership to the Council of the State Association for final determination.

SEC. 5. In hearing appeals the Council may admit oral or written evidence as in its judgment will most fairly present the facts, but in the case of every appeal both as a board and as individuals, the Councilors shall, preceding all such hearings, make efforts at conciliation and compromise.

SEC. 6. When a member in good standing in a component county society moves to another county in this State, he shall be given a written certificate of these facts by the Secretary of his society, without cost, for transmission to the Secretary of the society in the county to which he moves. Pending his acceptance or rejection by the society in the county to which he removes, such member shall be considered to be in good standing in the county society from which he was certified and in the State Association to the end of the period (respectively) for which his dues have been paid.

SEC. 7. Each county society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material condition of every physician in the county. Systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it includes every eligible physician in the county.

SEC. 8. At some meeting in advance of the Annual Session of this Association, each component county society shall elect one or more delegates and an equal number of individual alternates therefor to represent it in the House of Delegates of this Association, in accordance with Chapter III, Section 2, of these By-Laws. The Secretary of each county society shall send a list of such delegates and alternates to the Secretary of this Association at least thirty days before the Annual Session. Representation in the House of Delegates shall be contingent on compliance with the foregoing provisions.

SEC. 9. The Secretary of each county society shall keep a roster of its members and, if practicable, a list of non-affiliated physicians, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary by Council. He shall send a copy of the program of each county meeting to his district Councilor and to the Secretary.

SEC. 10. Each county society shall appoint or elect one of its members as a member of the auxiliary Committee on Legislation, and the county society secretary shall send his name and address at once to the Secretary of this Association. The Committee on Legislation of this Association shall formulate the duties of this auxiliary committee and supply each member with a copy. The auxiliary committeemen shall be accountable to their county societies and to the Council for prompt response to and continued co-operation with the Committee on Legislation of this Association.

CHAPTER XII

Secretaries' Meetings

Twice a year, in September and February, there shall be held a meeting of the Officers of the State Association together with the Secretaries of the county societies, in different sections of the State, for a conference in regard to matters of general interest to the Association, entertainment to be furnished by the State Association.

CHAPTER XIII

SECTION 1. These By-Laws may be amended at any Annual Session by a majority vote of the delegates present at that session, if the proposed amendment has been properly submitted to the House of Delegates and has lain on the table for one day.

SEC. 2. Upon the adoption of this Constitution and these By-Laws, all previous Constitutions and By-Laws are thereby repealed.

Committee:

HERBERT F. TWITCHELL, *President*,
FRANK Y. GILBERT, *President-Elect*,
BERTRAM L. BRYANT, *Secretary*.

JOURNAL OF THE MAINE MEDICAL ASSOCIATION

Dr. Frank Y. Gilbert, 148 Park St., Portland, Editor-in-Chief

Dr. James A. Spalding, Portland, Necrologist

Dr. Bertram L. Bryant, Bangor, Secretary Maine Medical Association

Dr. Stanley P. Warren, Portland, Chairman, Board of Councilors

Dr. Clarence Kendall, Augusta, State Commissioner of Health

Dr. C. A. Moulton, Hartland, Chairman Committee on Public Relations

Dr. E. H. Risley, Waterville, Chairman Cancer Committee

Dr. Thomas A. Foster, Portland, Chairman Scientific Committee

EDITORIAL COMMENT

Annual Meeting of the Maine Medical Association

"THE BELGRADE," BELGRADE LAKES,
June 18, 19 and 20, 1928.

The Maine Medical Association will meet at "The Belgrade," Belgrade Lakes, June 18, 19 and 20, as the guests of the Kennebec County Medical Association. Plans are being made for a fine meeting, and something worth while and entertaining is promised for every minute of the time. "The Belgrade" is one of the finest and most attractive hotels in the State, and the entire house, with all its facilities, will be at the exclusive disposal of the Association during this convention. Especial attention will be paid to the entertainment of the ladies, and it is hoped that a large number of them will be present. A fine program of sports will be carried out, the social side of the convention will be stressed, while the scientific program will be one of the best ever put on. Reservations will be made by the hotel management in the order in which they are received. There are five attractive cottages connected with the hotel, which may appeal especially to certain groups who may

wish to be together. These will be available for those wishing them in the order of application.

As an added feature, a program of clinics will be carried out in the near-by hospitals of Augusta and Waterville. It is felt that these will appeal to many of the men. Surgical clinics, following definite programs, to be announced later, will be put on by the staffs of the Augusta General Hospital in Augusta and the Sisters' Hospital in Waterville during the mornings of the 18th and 19th. On the afternoons of these days clinics will be held at the Central Maine Sanatorium in Fairfield on "Tuberculosis," and at the State Hospital in Augusta on "Mental Diseases."

The program as at present announced by the committee in charge is as follows:

Sunday, June 17th. Invitation Golf Tournament at "The Belgrade." Entries limited to physicians and their families. Prizes to be awarded.

Monday, June 18th. Clinics in the morning at the Augusta General and Sisters' Hospital; in the afternoon at the Central Maine Sanatorium and State Hospital. Sports arranged at the

hotel. Ladies' Golf Tournament. "Get-together dinner" at the hotel at 6.30. Attractive program, cabaret, etc. This should not be missed, as it will be very much worth while. Some good entertainment is promised. House of Delegates meets at 8.00 P. M.

Tuesday, June 19th. Clinical program at the hospitals as on previous

day. Admission by ticket, to be procured at desk in hotel. Scientific program at hotel, morning and afternoon. Banquet at 7.00 P. M., followed by President's ball.

Wednesday, June 20th. Scientific program morning and afternoon. Election. Adjournment.

PROVISIONAL PROGRAM OF MAINE MEDICAL ASSOCIATION

Belgrade Lakes Hotel, June 18 to 20, 1928

MONDAY, JUNE 18TH

- 10.00 A. M. to 12.00 M. Clinics.
Sisters' Hospital, Waterville, and Augusta General Hospital.
- 2.00 P. M. to 4.00 P. M. Clinics.
Fairfield Sanatorium and Augusta State Hospital.
- 8.00 P. M. House of Delegates.

TUESDAY, JUNE 19TH

- 9.00 A. M. "Fractures," Dr. E. L. Herlihy
Discussed by Dr. Boyer and Dr. Thaxter.
- 9.30 A. M. "Treatment of Septicemia," Dr. W. B. Trickey
Discussed by Dr. Goodrich and Dr. McQuillan.
- 10.00 A. M. "Acute Endocarditis," Dr. J. O. Piper
- 10.30 A. M. "Studies in Breast Tumors," Dr. M. Warren
Discussed by Dr. Thompson.
- 11.00 A. M. (a) "Endoscopic Diagnosis," } Dr. F. T. Hill
(b) "The Hard of Hearing," }
Discussed by Miss Persis Vose, Portland Speech Readers Guild.
- 12.00 M. Luncheon.
- 1.30 P. M. President's Address.
- 2.00 P. M. Visiting Delegates.
- 2.30 P. M. "Sterility in the Male," Dr. M. B. Sanders
Discussed by Dr. Mitchell and Dr. Merrill.
- 3.00 P. M. "Sterility in the Female, from the Endocrine Standpoint," Dr. C. H. Lawrence
- 3.30 P. M. "The Heart in Infections," S. A. Levine
- 7.00 P. M. Banquet.
Address, "The Seventy-fifth Anniversary of the Maine Medical Association," Dr. Daniel A. Robinson

WEDNESDAY, JUNE 20TH

SYMPOSIUM ON SYPHILIS

9.30 A. M.	"Congenital Syphilis,"	Dr. J. Gotlieb
10.00 A. M.	"Bone and Joint Syphilis,"	Dr. H. Lamb
10.30 A. M.	"Visceral Syphilis,"	Dr. B. B. Foster
11.00 A. M.	"Treatment of Certain Cases of Neuro-Syphilis,"	Dr. H. Solomon
	Separate Meeting of New England Council.	
12.00 M.	Luncheon.	
1.30 P. M.	Oration, "Cancer of the Cecum,"	Dr. Lincoln Davis, Boston
2.00 P. M.	"Acute Appendicitis in Very Young Children,"	Dr. T. A. Foster
2.30 P. M.	"Traumatic Bile Cyst,"	Dr. A. H. McQuillan
	Separate meeting of Eye Section,	Dr. Zentmeyer
3.00 P. M.	Report of House of Delegates.	

COUNTY NEWS AND NOTES

Kennebec County Medical Association

The quarterly meeting of the Kennebec County Medical Association was held at the Sisters' Hospital, Waterville, Tuesday, April 4, 1928.

The meeting was called to order at 4.30 P. M. by the President, Richard H. Stubbs, and was turned over to Dr. E. H. Risley, chief of the staff, who had charge of the clinical session. The following case histories were presented, and each was followed by a general discussion, which brought out many interesting points: "Massive Collapse of the Lung," Dr. J. P. Goodrich; "Hypothyroid Keratitis," Dr. V. C. Totman; "Coronary Thrombosis," Dr. J. O. Piper; "Congenital Laryngeal Stridor," Dr. F. T. Hill; "Habitual Abortion," Dr. A. H. McQuillan; "Tonsillitis, Acidosis, Abdominal Pain, Appendicitis Syndrome," Dr. E. H. Risley; "Treatment of Puerperal Septicemia," Dr. R. L. Reynolds; "Perinephritic Abscess," Dr. B. O. Goodrich; "Intestinal Obstruction Due to Ovarian Cyst," Dr. J. E. Poulin.

Dinner was served at 6.30 and was followed by a business meeting.

Dr. Norman B. Murphy, of Augusta, was elected to membership.

Dr. Frederick T. Hill, chairman of the general committee for arrangements for the annual meeting of the Maine Medical Association at Belgrade, Maine, June 18, 1928, outlined the program which has been arranged. This was followed by a report of the sub-committees.

Dr. Frederick T. Hill, chairman of the committee on the "hard-of-hearing child," outlined the tentative program and work for the year, which was approved by the association. The society voted to pay for all printing which it will be necessary to have done.

It was voted that the Kennebec County Association will hold two extra meetings during the year, making six instead of four.

Dr. Herbert F. Twitchell, President of the Maine Medical Association, was present and gave a short talk. This was followed by the scientific program. Dr. Harry Smith Emery, of Portland, one of the best authorities in the state on diabetes, was the principal speaker.

The subject of his paper was "Diabetes." His talk was very interesting, as well as instructive, and was greatly enjoyed by all.

The members and guests present were: Drs. N. B. Murphy, G. A. Coombs, F. R. Carter, R. H. Stubbs, M. A. Priest, W. B. Sanborn, G. R. Campbell, Augusta; H. W. Abbott, N. Bisson, V. C. Totman, B. P. Hurd, F. T. Hill, A. H. McQuillan, B. O. Goodrich, J. F. Hill, J. O. Piper, Edw. H. Risley, P. S. Merrill, J. P. Goodrich, H. L. Pariso, A. R. Daviau, R. L. Reynolds, J. E. Poulin, Waterville; H. F. Twitchell, H. S. Emery, Portland; F. H. Freeman, Pittsfield; W. L. Gousse, Fairfield; E. P. Williams, Oakland; C. H. Newcomb, Clinton; W. W. Hendee, No. Vassalboro; L. D. Herring, F. H. Badger, Winthrop.

Respectfully submitted,
FREDERICK R. CARTER, M. D.,
Secretary.

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THE JOURNAL

OF THE

Maine Medical Association

Published under direction of the Council of the Maine Medical Association

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The Journal assumes no responsibility for opinions expressed by the authors.

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MAY, 1928

No. 5

COMMITTEE REPORTS

MAINE MEDICAL ASSOCIATION

SECRETARY'S REPORT

The usual routine work of this office has continued to increase each year, and this year has been no exception. My secretary, Mrs. Clark, now has had several years' experience and is able to handle most of the details. All letters have been answered promptly and all information given when requested, in so far as possible.

Your Secretary, as delegate, attended the meeting of the A. M. A. at Washington and expects to be present at the one in Minneapolis just before our annual meeting. He was present at one meeting of the New England Council in Boston, and at the State Secretaries' Meeting in Chicago; also a guest at the banquet given in celebration of the one hundredth anniversary of the *Boston Medical and Surgical Journal*. He was one of the speakers on the subject of "Medical Defense" at the Coos County Society at Gorham, N. H., and has visited several of our county societies.

CONSTITUTION AND BY-LAWS

At your last meeting it was voted to revise the constitution and by-laws of the Association, and a committee, composed of your President, President-Elect and Secretary, was appointed to do the work. The model state constitution recently drawn up by a committee of the American Medical Association was taken as a basis. Some changes were made to adapt it to our needs, and the result of our work was published in the May JOURNAL. Copies have also been sent to the secretaries of all county societies. According to the present constitution, this procedure makes it possible to adopt the new constitution at the next meeting of the House of Delegates. There are but few important changes. The duties of the Council are somewhat enlarged, and the members become a board of trustees for the Association and have charge of the finances. An auxiliary committee on legislation is provided for, representatives to be elected by each county society to assist the state

committee in legislative work, these members to receive all information from the state committee, keep their own society informed of all legislative measures, and be ready to assist when called upon in any emergency.

All members of the House of Delegates should read this new constitution with care and be ready to offer suggestions or amendments before its final passage.

A model constitution is now being prepared by the A. M. A. for county societies. As soon as issued, copies will be furnished to all county secretaries.

SECRETARIES' MEETINGS

A new procedure regarding these meetings was tried out this year with a considerable degree of success. In September, the meeting was held in Bangor in the afternoon of the evening meeting of the Penobscot County Medical Society. After the business was transacted, an adjournment was made to a joint meeting with the county society, where the principal subjects of interest were presented for discussion.

A second joint meeting was held with the Cumberland Society in Portland in February. It is hoped that in this way the members of the county societies will become familiar with the work and problems of the State Association.

Next year these meetings will be held in other sections of the state, possibly Augusta and Lewiston.

PUBLIC HEALTH

The Association regrets the loss of Walter D. Thurber, Secretary of the Maine Public Health Association, who was obliged to resign his position on account of ill health. It was largely through his efforts that such close co-

operation was brought about between lay health organizations and the medical profession. But it is a pleasure to know that under the present management the same pleasant relationship continues and that a still closer co-operation is being perfected. No work is attempted in any county without first consulting with the county medical society, asking for their advice and supervision. Through the visiting nurses health propaganda can be easily carried on, which could not be attempted by the medical profession. For instance, in one county there had been a wide advertising of a certain cancer cure, which it would have been extremely difficult for the medical profession to combat. A suggestion to the supervising nurse of the M. P. H. A., and within a week, through the county nurse, standard cancer literature was distributed throughout the county. Talks were given to ladies' clubs and other lay organizations and the campaign was on, with very beneficial results.

SEVENTY-FIFTH ANNIVERSARY

This is the seventy-sixth meeting and the seventy-fifth anniversary of our Association. Although a medical society was started when Maine became a separate state, in 1820, it went out of existence some twenty years later. The present State Association was incorporated in 1853 and has held regular meetings ever since. To commemorate this event, appropriate addresses will be given at the banquet on Tuesday evening. It is expected that delegates will be present from all the state societies of New England.

CLINICS

It is a pleasure to report an increasing number of clinics being held by the

various county societies in connection with their local hospitals. These have been very popular and have increased the interest and attendance of the county meetings wherever held. Cumberland, Kennebec, Penobscot and others have done conspicuous work this year. The clinics bring in often a number of new men from outside the county. It is hoped that this work will continue the coming year, and that the material in every local hospital be utilized to the advantage of all the medical profession throughout the state. In addition, the Maine Public Health Association and other health organizations stand ready to assist the county societies in putting on chest and crippled children clinics whenever the county society desires to do so. Several are already planned for the near future.

NEW ENGLAND MEDICAL COUNCIL

Two meetings were held during the year, at Portsmouth, N. H., in June, and at Boston in November. A majority of your delegates were present at both meetings. The principal topics under discussion were "Medical Education" and "Distribution of Physicians and Medical Registration." Printed reports of these meetings have been sent to the officers and secretaries of county societies. Copies are available to those interested on application to the Secretary.

We are honored by having the Council meet with us this year during our annual meeting at Belgrade. It is hoped that the majority of the New England delegates will be able to be present at the banquet to help celebrate our seventy-fifth anniversary.

FULL-TIME SECRETARY

From time to time the question of the expediency of employment of a full-time Secretary has come up, but has never been fully discussed. Your present Secretary has served the Association for nearly eleven years, ten full terms and filling out Dr. Thompson's term while he was in the service. Having also attended all the yearly Secretaries' Conferences in Chicago, and served as a delegate to the A. M. A. for the same number of years, he has been in a position to watch the growth of the work and the problems of the medical profession as but few have been privileged. During this time radical changes have been taking place in the practice of medicine. The individualist type of practitioner, the family physician, is fast being eliminated. Group practice, the specialist, clinics of all kinds, dispensing hospitals, outpatient departments, bring both physicians and patients to the larger centers. The activities, both federal and state, in preventive medicine, together with the lay groups, with health nurses of all kinds necessary for the education and care of the public, have been rapidly increasing. The cults have been a large factor in the economic problem, and have kept up a merry warfare in state legislation. To meet these changing conditions and new problems, increased activities are demanded of our medical organizations, both for education and protection of the profession. The work which, up to this time, has been carried on by volunteers now demands the attention of full-time, well-paid specialists. The A. M. A. is doing all it can in collecting data and giving information, but it is up to the state and

county associations to do the active work for their own protection. As a result, many of the states have already seen the need and have raised their dues and employed full-time secretaries to look after their interests. Some of these secretaries are physicians, others are laymen. At the present time, California, Indiana, Massachusetts, Missouri, Ohio, Texas, Virginia, West Virginia and Wisconsin all have full-time secretaries. Those in Massachusetts, California, Missouri and Texas are physicians. Those in the other states mentioned above are laymen. Florida, Idaho, New Jersey, New York, Oregon and Pennsylvania all have executive secretaries or associate secretaries of some kind. In Oregon, Idaho and Kentucky public health interests are closely associated with the state societies and their secretaries co-operate to a great extent with the state secretaries. Several other states have part-time secretaries and receive a smaller salary while continuing their professional work. From personal knowledge in attending the yearly secretaries' meetings in Chicago, and from recent correspondence with several of these secretaries, I find all enthusiastic concerning the results obtained.

What would be some of the duties of a full-time secretary? He would look after the routine office work and correspondence. He would be the secretary of all standing committees, would see that they functioned in an efficient manner, and would look after their reports. He would be publicity agent for these associations and editor of the *JOURNAL* or the Maine Department in the *New England Journal*. He would look after the proper news and necessary write-ups for the lay press. He would have

the general oversight over the annual meetings. He would keep in touch with the work done in other state associations and with the national association. He would make the necessary contacts in the various health bodies of the state and assist them in so far as possible with their work. He would assist the Legislative Committee, watching to defeat harmful legislation and assisting in promoting progressive medical laws and would keep the auxiliary legislative county committee informed and call them to assist when necessary. He would look after the medical defense and assist in working up the cases, and would see that liability insurance was kept up. He would attend, for a time, all meetings of county societies and assist in their programs and get acquainted with the individual members and their problems. He would keep an information bureau to assist new physicians in locating in desirable places and help in making their contracts, and furnish information to all members of the profession in so far as possible when requested. He would have charge of post graduate work, the obtaining of speakers and the carrying on of clinics. He would see that physicians obtained the best rates in automobile, health and other forms of insurance, and assist them in every other way possible. These are some of the duties which a full-time secretary would undertake. He is the executive secretary of the Council, which is the board of trustees, and acts as the business manager of the Association.

The salary of such a man would depend upon his experience and ability and the amount of work expected. Usually a young man is selected who is experienced in newspaper work, at a

salary of \$3,500.00 a year. Office expenses, including a stenographer and travel expenses, would amount to about \$2,500.00, making an estimated budget of \$6,000.00. If, as in other states, it should seem best to the Council to share the services with some other health organization, the expenses would be halved and a more experienced man could be employed at less expense to each organization. In order to finance this office, it would be necessary to raise the state dues to at least ten dollars a year, which would increase our present yearly income from \$3,000.00 to about \$7,500.00. This should not be a hardship, as at the present time we are paying \$4.00 and are receiving in return a saving of from \$8.50 to \$25.00 in medical liability insurance alone. Further plans are being considered which should greatly increase the financial advantage to every member of the Association, to say nothing of the betterment of the welfare of both the physician and the public. For your information we are giving below the amount of dues and income of all the state associations.

"Thirteen states now have dues of \$10.00 or more and twelve states have an annual budget of \$20,000.00 or more, according to a compilation made recently. The dues and totals received follow:

<i>Society</i>	<i>Dues</i>	<i>Total Rec'd</i>
District of Columbia,	\$20.00	\$11,000.00
Arizona,	15.00	3,000.00
Minnesota,	15.00	30,000.00
California,	10.00	43,000.00
Florida,	10.00	10,000.00
New York,	10.00	111,000.00
Michigan,	10.00	30,000.00
New Jersey,	10.00	23,000.00
Rhode Island,	10.00	4,000.00
Texas,	10.00	36,000.00
Vermont,	10.00	3,700.00
West Virginia,	10.00	11,000.00
Wisconsin,	10.00	20,000.00

Illinois,	8.00	58,000.00
Missouri,	8.00	26,000.00
Nebraska,	8.00	3,000.00
Massachusetts,	8.00	35,000.00
Indiana,	7.00	19,000.00
Nevada,	7.00	600.00
Idaho,	6.00	1,000.00
Colorado,	5.00	6,000.00
Delaware,	5.00	800.00
Georgia,	5.00	8,000.00
Kansas,	5.00	8,000.00
Kentucky,	5.00	10,000.00
Montana,	5.00	2,000.00
New Mexico,	5.00	1,000.00
North Dakota,	5.00	2,000.00
Ohio,	5.00	26,000.00
Pennsylvania,	5.00	38,000.00
South Dakota,	5.00	2,000.00
Utah,	5.00	2,000.00
Virginia,	5.00	9,000.00
Washington,	5.00	6,000.00
Connecticut,	4.00	5,000.00
Louisiana,	4.00	5,000.00
Maine,	4.00	3,000.00
New Hampshire,	4.00	2,000.00
Oklahoma,	4.00	7,000.00
Tennessee,	4.00	6,000.00
Alabama,	3.00	5,000.00
Arkansas,	3.00	4,000.00
Mississippi,	3.00	3,000.00
North Carolina,	3.00	5,000.00

It is impossible in this limited report to enter fully into the discussion of this subject. It should be left in the hands of the Council for further study. They, after due deliberation, should take the matter up with their individual county societies, and should act only after they are convinced that it is with their consent and for the best interest of the Association.

HONORARY MEMBERS

In looking over the roster of members, we find some twenty odd physicians who have completed fifty years of active practice. Some years ago it was suggested that some token of appreciation should be shown these men by the Association. In some counties the societies have given dinners in their honor, and have made them honorary members of their society. It would seem fitting that these men should also be made honorary members of the

State Association, which can be done if their dues have been paid up to the time their names are presented to the House of Delegates. It would seem fitting that after so long a service they should not be deprived of any of their rights, even if their dues are remitted. All county secretaries have been notified to present their fifty-year members of good standing.

As all of the county secretaries have not at this time of printing sent in their roster of members or dues, a supplementary report, and that of the Treasurer, will be submitted to the meeting of the House of Delegates.

BERTRAM L. BRYANT,
Secretary.

REPORT OF COUNCILOR OF FIRST DISTRICT

I have the honor to submit herewith my report as Councilor for the First District for the current year of the State Medical Association.

My district comprises the counties of York and Cumberland.

The York County Society, after a year of quietude, has resumed activity with a vengeance since January first, which augurs extremely well for the future. Despite the long distances which some of its members are obliged to travel, this society held meetings, with dinners, at the Webber Hospital in Biddeford in January and in April. Excellent papers were presented and enthusiastic discussions followed, indicating a realization upon the part of members that isolation means inevitable mental stagnation, if not suicide.

Meetings have already been arranged for the months of July and October, and there is under consideration a plan

whereby several joint meetings may be arranged each year with the Cumberland County Society.

In Cumberland, clinics at the Maine General Hospital have been held in conjunction with each session of the society. These clinics have been most instructive and have reflected great credit upon their sponsors.

The didactic sessions, of which there have been six, instead of four, as required by the society's constitution, have been addressed by men who are regarded as authorities in their particular fields, and at each meeting the attendance has been gratifyingly large and appreciative.

Respectfully submitted,

E. W. GEHRING, M. D.,
Councilor First District.

REPORT OF COUNCILOR OF SECOND DISTRICT

As Councilor of the Second District, which includes Androscoggin, Franklin and Oxford County Societies, I wish to report that I have made the visitations to the meetings, which have been both interesting and instructive, and I learn that the societies are maintaining their standard and increasing their interest at the meetings.

Respectfully submitted,

JOHN STURGIS, M. D.,
Councilor Second District.

REPORT OF COUNCILOR OF THIRD DISTRICT

I have the honor herewith to report as Councilor for the Third District. Both in Sagadahoc and Knox Counties the membership remained the same.

Knox County has lost one member and gained one. Your Councilor expects to attend the meeting of the Knox County Association early in May, when he will lay before that county the recommendations for future state association activities.

At a recent meeting of Sagadahoc County it was voted to approve the proposed insurance activities of the state association. They also voted to approve the proposition of increased state association dues, with the appointment of a lay secretary. The President of the State Association will be entertained by the Sagadahoc Association the last of May.

Respectfully submitted,

W. E. KERSHNER,
Councilor Third District.

REPORT OF COUNCILOR OF FOURTH DISTRICT

We have had a most successful year. Kennebec County is to be congratulated on the splendid meetings they have held. The attendance at these meetings I believe has exceeded all previous years' records, not only of this society, but of all other societies in the state. Evidently Ted and Fred are a good team. Carl Stevens is formulating plans for a wide-awake meeting to be held the last of this month or the first of next.

Somerset County has had its share of meetings and is planning a joint meeting with Franklin to be held in the near future, at least before the state meeting. Our general observation led us to believe that there has never been a time when our profession in this corner of the state has been more closely knit. The June state meeting should be the biggest and the most important meeting

that we have ever had. There are, as you know, vital questions coming up for decision. Let's all be there.

Fraternally,

GEO. E. YOUNG, M. D.,
Councilor Fourth District.

REPORT OF COUNCILOR OF SIXTH DISTRICT

The Aroostook, Penobscot and Piscataquis County Societies have held their regular meetings during the year. These meetings are well attended and practically all the active physicians belong to the societies. Each member seems to appreciate the value of closer co-operation.

Respectfully submitted,

Councilor Sixth District.

A. K. P. SMITH.

REPORT OF COMMITTEE ON STATE HOSPITALS

Your Committee on State Hospitals has visited the institutions at Augusta and Bangor, made careful inspections, and submit the following report:

In response to ever-increasing demands, both hospitals have been obliged to take cases in excess of their physical capacity. This has resulted in an unreasonable overcrowding of patients, with inadequate medical and nursing facilities. Maintenance appropriations for personal service have been entailed to an embarrassing degree, so that a reduced personnel of physicians and nurses has been necessary in order to keep within the appropriations. There are two thousand and twenty-six (2,026) patients at the present time in both hospitals; one thousand, two hun-

dred and forty-two (1,242) at Augusta, and seven hundred and eighty-four (784) at Bangor. Since 1910 there has been an increase of seven hundred and sixty-eight (768) patients in the resident population. After many years of negligence, the last Legislature provided funds for a building for male patients at Bangor and a building for nurses at Augusta. These buildings were badly needed and will partially alleviate the congested condition, but additional accommodations are an urgent necessity.

The influence, support and co-operation of the medical profession of the state is also urgently solicited in recodifying the statutes in regard to the administration and management of the hospitals and the commitment of patients.

The administration of the hospitals is vested in a board of trustees that appoints a superintendent, a steward and treasurer. These officials are responsible to the trustees, and, while the superintendent is supposed to be the nominal head of the institution and carry the responsibility, the steward and treasurer are quite independent of the superintendent and responsible chiefly to the trustees. The proper management and efficiency of these institutions, therefore, depends upon the harmonious co-operation and agreement of the individuals occupying these separate and independent positions. This is an intolerable situation and should be changed. The superintendent, who is generally supposed to be the responsible head of the institution, should be placed in a position of undivided authority, and have the appointment of all officers and employees and sole supervision of their

activities, under the direction and with the approval of the trustees.

Another objectionable feature is that the trustees must make the appointments of superintendent and steward and treasurer with the approval of the Governor and Council. This requirement makes these positions political in nature, for the statutes expressly state that these officials shall hold office during the pleasure of the Governor and Council. Fortunately, this prerogative has never been exercised for political reasons, but, nevertheless, should be changed so as to harmonize with what has become an accepted policy.

Mental disease is a medical problem. The ancient doctrine of demoniacal possession and evil spirits has long since been replaced by a medical concept, expressed in terms of mental disease. The term "insanity" is applicable only in a legal and social sense, as it has no medical or scientific significance. But an individual suffering from mental illness must still be subjected to an humiliating legal procedure and be declared insane before he is eligible for treatment in one of our hospitals.

Recognizing the right of mentally sick persons to immediate treatment, our regular commitment law has been amended by an emergency clause, which does away with the usual delay of twenty-four hours in special cases. Provision through legislative enactments has also been made for voluntary and temporary care with necessary restrictions. The observation law, which has previously been applicable only in criminal cases in the higher courts, has been modified to include civil cases in the lower courts. These modifications of our rigid and obsolete commitment

procedure have proved to be highly satisfactory, and the time has arrived for additional modifications that seem advisable in the interests of humanity.

The temporary care law should be changed so as to increase the time during which the patient may be detained to ninety or more days instead of fifteen days as at present. In many cases, fifteen days is not sufficient for treatment or even diagnosis, and as most acute cases recover within a year from the time of onset, the period of temporary care could be extended with great benefit to the patient, and a formal commitment would often be unnecessary.

In regard to regular commitment. Authority is now vested in the board of selectmen of towns, the municipal officers of cities, and in the judge of probate of the county. These officials, after a hearing, at which the patient may or may not be present, make their decision on the testimony of two physicians. This requirement is in accord with the understanding that it is a medical problem; therefore, in the interest of humanity, the commitment should be made entirely on medical authority and the patient should have the right to be admitted on the physicians' certificate, properly certified to by a notary public or justice of the peace, so as to become a matter of public record. This would obviate the necessity of lay official action, which is so objectionable and unnecessary. It should not be necessary to declare a patient insane before he can be admitted to one of our hospitals. Many patients who suffer from mental disease, and require state hospital treatment, are not insane in the legal sense. While no person can be deprived of his liberty without process of law, the patient

would still have his legal rights and could take the matter to court through his attorney, relatives or friends as now provided.

Your committee is greatly impressed with the importance of these suggestions, and recommends that they be referred to the Committee on Legislation of this Association for further consideration.

Respectfully submitted,

E. D. MERRILL, M. D.,

Chairman Hospital Committee.

REPORT OF COMMITTEE ON HEALTH IN SCHOOLS

Reports from many parts of the state indicate a continued general improvement in the health of the school children.

Several factors combine to bring about this satisfactory condition. The school building program has developed under careful supervision and has gone forward to establish good schoolhouses with good sanitary arrangements. The State Board of Health and the local boards have used effective methods to educate the public in health rules and regulations, and have carried out practical plans to enforce health measures for the individual citizen and for the school children in general. Medical societies have given counsel and professional service to promote preventive medicine in schools and to carry on examinations and nutritional classes. Non-medical and unofficial agencies have given generous support and in some instances active service toward measures for preserving the health of children. The M. P. H. A., through the "Health Crusade," has interested

about 50,000 school children in daily health chores, and consequently helped to raise Maine's health rating to a high standard.

Among many of the specific accomplishments may be mentioned the inoculation of 3,500 school children with diphtheria toxin-antitoxin in Portland. (The proposal received splendid support in Portland and no untoward incidents have been reported.) The maintenance and extension of nutritional classes and fresh air rooms in many schools of the state. The establishment of special rooms for backward children. The testing of the hearing with the audiometer of 1,800 school children in Portland.

Your committee commends all these activities, and urges continuation and extension of the good work. We further comment on the regulated school lunch with milk sucked through the cap with a straw.

We would like to say a word for larger school yards. The danger from automobile accidents to school children in the street is increasing. A large playground connected with the school building will minimize these accidents. We would like to report in behalf of an extension of the prophylactic dentistry in selected schools, and to sound a warning against urging young school children to engage too strenuously in competitive athletics and in multiple non-curriculum school activities.

It is apparent to the committee that the attractive schoolhouses and the healthful atmosphere appeal to the children and make going to school a pleasure which most children dislike to miss.

THOMAS A. FOSTER, M. D.,
Chairman.

REPORT OF COMMITTEE ON PUBLIC RELATIONS

Your Committee on Public Relations has very little to report for the past year. Probably the most important matter on public relations to engage the attention of the members of the society will be the proposed new joint board, medical and osteopathic act, a draft of which is in the hands of some of the members of the Association. This matter has had the consideration of a special committee, and will be presented to the Association for discussion and decision at the forthcoming meeting. Your Public Relations Committee sincerely desire that it may have careful consideration before action is taken.

Respectfully submitted,

FRED W. MANX, M. D.,
Chairman.

REPORT OF LEGISLATIVE COMMITTEE

Your Legislative Committee has considered carefully the matters which have been of its concern.

We well realize that the barriers in this state should be strengthened, a permanent safeguard against the licensing of the unfit should be established.

To-day, in Maine, the creation of different boards of examiners, with varying standards, has resulted in confusion. A loophole exists, in that *any* legislature may grant to *any* examining board the right to examine in *any* subject.

In accordance with the desire of the House of Delegates, this committee has endeavored to ascertain all viewpoints. It has met in round table discussion with those representing branches of the

healing art differing in treatment from our own, and, in conjunction with them, and in accordance with your instructions, we have employed men well versed in law to draw up a general act of licensure pertaining to the healing art. This will be presented to you in June, at annual meeting. In it you may find matters with which you may take issue. Our hope is, that with this as a beginning, something constructive may result.

It is our duty to consider these matters in all fairness; to keep ever in mind the rapidly changing trend of affairs; to present constructive ideas and helpful suggestions, which may result in a better understanding of these problems.

L. P. GERRISH, M. D.,
J. D. PHILLIPS, M. D.,
F. W. MITCHELL, M. D.,
Legislative Committee.

REPORT OF VENEREAL DISEASE COMMITTEE

This committee regrets that, up to the present time, a satisfactory pamphlet has not been secured for the adolescent boys and girls. Such a pamphlet is undergoing criticism by a large number of interested educators, and it is hoped to have it for distribution before very long.

As director of the Division of Social Hygiene of the State Health Department, the chairman of this committee has given talks in forty-two high schools in the past year to boys and girls separately, with a total of one hundred and sixty-four lectures to different types of audience, totaling 19,912 throughout the state, and has also, upon request, distributed 4,264 pamphlets furnished by the State Department of Health.

It is felt that endorsement of this work by the State Medical Association through the medium of a committee is of very great value to the work.

GEORGE H. COOMBS, M. D.,
Chairman.

REPORT OF CANCER COMMITTEE

The Cancer Committee have had two conferences during the year. Dr. John Hewat, who was appointed as a member of the committee, has left the state, and Dr. J. L. Johnson was appointed in his place.

During the year some literature has been distributed with special reference to the fake cancer cures which appear to be a growing public menace.

H. E. THOMPSON,
MORTIMER WARREN,
J. L. JOHNSON,

Cancer Committee.

REPORT OF NECROLOGIST

During the current year the following members have fallen out of our ranks, all leaving exemplary records in medicine:

Bial Francisco Bradbury, Norway, a leader in Oxford County.

Neils Christian Hansen, a former clergyman and later a physician in Portland.

William Brown Haskell, a steady practitioner in Oxford.

Jane Lord Hersom, widow of a former member of our Association, and well known for charitable work in Portland.

Charles Benjamin Hoit, of Liberty, a sturdy country doctor.

Vietor Lagerson, a pioneer of Aroostook County, a practitioner in Westbrook, and occasionally a preacher of the gospel.

Frank Marcellus Ross, son of a founder of the Association, and a leader in York County, practicing more than fifty years in Kennebunk, and covering, with his father, a continuous practice of almost a hundred years in Kennebunk.

Adin Louis Smith, a physician in Machias, whom children loved.

John Irving Sturgis, a leader in medicine and in politics in his county, and village, New Gloucester.

Ivory Pease Tash, Fairfield, a physician who was kind to the poor.

Charles Sargent Underhill, Ogunquit, died after an operation.

Galen Murray Woodcock, Bangor, a former President of our Association, a man of noteworthy talent as a writer of medical letters and papers.

Many anecdotes concerning our fellow members could be added, but with reluctance they have to be omitted. They shall be preserved for the history of medicine in Maine, sure to be written some of these days.

JAMES A. SPALDING,

Necrologist.

MAINE MEDICAL ASSOCIATION

Belgrade Lakes Hotel, June 18 to 20, 1928

MONDAY, JUNE 18TH

- 10.00 A. M. to 12.00 M. Clinics.
Sisters' Hospital, Waterville, and Augusta General Hospital.
- 2.00 P. M. to 4.00 P. M. Clinics.
Fairfield Sanatorium and Augusta State Hospital.
- 6.30 P. M. Get-together Dinner, The Belgrade.
- 8.00 P. M. House of Delegates.

TUESDAY, JUNE 19TH

- 9.00 A. M. Opening Prayer, Rev. Wm. A. Smith, Waterville.
"Orthopedic Aspect of Low Back Pain," Dr. E. L. Herlihy, Bangor
Discussed by Dr. E. G. Abbott.
- 9.30 A. M. "Acute Endocarditis," Dr. J. O. Piper, Waterville
Discussed by Dr. E. C. Higgins.
- 10.00 A. M. "Studies in Breast Tumors," Dr. Mortimer Warren, Portland
Discussed by Dr. H. E. Thompson.
- 10.30 A. M. (a) "Endoscopic Diagnosis," }
11.00 A. M. (b) "The Hard of Hearing," } Dr. F. T. Hill, Waterville
Discussed by Dr. S. E. Fisher and Hon. F. Harold Dubord
(by invitation).
- 12.00 M. Luncheon.

- 1.30 P. M. President's Address, Dr. Herbert F. Twitchell, Portland
- 2.00 P. M. Visiting Delegates.
- 2.30 P. M. "Sterility in the Male," Dr. M. B. Sanders, Boston
Discussed by Dr. Alfred Mitchell.
- 3.00 P. M. "Sterility in the Female from the Endocrine Standpoint,"
Dr. C. H. Lawrence, Boston
Discussed by Dr. C. M. Robinson.
- 3.00 P. M. Separate Meeting of the New England Council.
- 3.30 P. M. "The Heart in Infections," Dr. S. A. Levine, Boston
Discussed by Dr. J. O. Piper.
- 7.00 P. M. Banquet.
Address, "The Seventy-fifth Anniversary of the Maine Medical Association," Dr. Daniel A. Robinson, Bangor

WEDNESDAY, JUNE 20TH

SYMPOSIUM ON SYPHILIS

- 9.30 A. M. "Congenital Syphilis," Dr. J. Gottlieb, Lewiston
Discussed by Dr. W. J. Renwick.
- 10.00 A. M. "Bone and Joint Syphilis," Dr. H. W. Lamb, Portland
Discussed by Dr. Allan Woodcock.
- 10.30 A. M. "Visceral Syphilis," Dr. B. B. Foster, Portland
Discussed by Dr. E. W. Gehring.
- 11.00 A. M. "Treatment of Certain Cases of Neuro-Syphilis,"
Dr. H. Solomon, Boston
- 12.00 M. Luncheon.
- 1.30 P. M. Oration, "The Value of Diagnostic Curettage Before Hysterec-
tomy," Dr. Lincoln Davis, Boston
Discussed by Dr. C. M. Robinson.
- 2.00 P. M. Separate meeting of Eye Section—"Muscles," Dr. Wm. Zentmeyer

SYMPOSIUM ON REFRACTION.

- 2.00 P. M. "Appendicitis in Children," Dr. T. A. Foster, Portland
Discussed by Dr. Neil A. Fogg and Dr. A. W. Fellows.
- 2.30 P. M. "Traumatic Bile Cyst," Dr. A. H. McQuillan, Waterville
- 3.00 P. M. Report of House of Delegates.
Election of President-Elect.

Absentee's Ballot for June Primaries.

Every physician should secure an absentee ballot from the city or town clerk, fill it out and mail it before leaving.

CONSIDERATION OF HIGH BLOOD PRESSURE DUE TO SMALL LUNGS

By WILLIAM LINTZ

Lintz draws the following conclusions from his study of high blood pressure:

1. Hypertension is responsible for more deaths than tuberculosis and cancer combined.
2. Heredity is the most important known factor.
3. Hypertension is due to a spasm of the arteriocapillary bed, produced by the vasomotor center in the medulla.
4. Death is caused, in order of frequency, by heart failure, cerebral hemorrhage, arteriosclerosis and nephritis.
5. Blood transfusions lower blood pressure.
6. Polycythemia frequently exists without hypertension.
7. Sodium chloride is not a factor in hypertension.
8. Hypertension belongs to the allergic group of diseases.
9. Hypertension cases stand operations well, hypotension cases poorly.
10. Psychic and actual pain raise blood pressure decidedly in hypertension cases, but only negligibly in normal cases.
11. Stable blood pressure has few symptoms, labile blood pressure has many symptoms.
12. Variations and long remissions frequently occur in hypertension.
13. Prognosis of a case may be made from study of a hypertensive relative.
14. Absence of axillary hair is a frequent finding in hypertension, especially in women.
15. The endocrine glands have an important bearing on hypertension.
16. Hemorrhage in the brain lowers blood pressure.
17. Retinal hemorrhages prognosticate cerebral hemorrhage.
18. The diastolic pressure is more important than the systolic.
19. Hypertension does not contraindicate the use of digitalis.
20. Valvular lesions are not responsible for hypertension.
21. Dropping blood pressure in old age means cardiac weakness.
22. Spasms of the renal vessels, arteriosclerosis leading to renal damage is the true sequence in essential hypertension.
23. Hypertension exists more often in the young than is usually believed.
24. High altitude lowers blood pressure, low altitude raises it.
25. Alcohol lowers blood pressure.
26. Smoking is injurious in hypertension.
27. Syphilis is no factor in hypertension.
28. The height of blood pressure alone is no criterion as to the severity of the disease.
29. Calcium iodide in sixty-grain doses, t.i.d. p.c., was found beneficial in asthma and in hypertension.

Lintz draws attention to the fact that in very many patients with essen-

tial hypertension, especially in females, he has found the lungs smaller than usual. Whether the lungs are the result or cause of the hypertension it is impossible to say. Increased weight is common in hypertension. The author wonders if the small lungs may be at least partly accounted for by the high diaphragm resulting from the increased abdominal fat. Does the improvement in many cases following reduction in

weight lie in the improvement of diaphragmatic respiration and consequently more efficient oxygenation? To the neuropathic, endocrinopathic and basopathic inferiority of the essential hypertension subject Lintz adds also this pulmopathic inferiority.

His conclusions were drawn from Roentgenologic study of 100 patients. —*International Clinics, December, 1927.*

NOTES ON NORWEGIAN OPHTHALMOLOGY, ESPECIALLY ON THE DIAGNOSIS AND TREATMENT OF GLAUCOMA PATIENTS

By SIGURD HAGEN

Professor Hagen has found the intra-ocular pressure curve of the greatest practical importance in diagnosis and treatment of glaucoma.

There are daily variations in pressure. The maximal pressure occurs in the morning and the minimum in the evening. In the "inverse type" the pressure is highest in the evening. The curves for both eyes follow one another in an almost parallel course.

In the early stages of glaucoma the whole pressure curve often is below the limit of the normal tension. Yet the typical daily variations prove the presence of glaucoma.

The pressure in the normal eye may also vary, but very slightly.

In treatment of glaucoma the pressure curve is also of importance. It is

of great practical importance to be able to demonstrate the effect of myotics on the pressure curve. Failure to obtain a completely satisfactory effect from myotics is an indication for operation or at any rate for frequent and careful observation of the patient so as not to risk postponing the operation too long.

As to the method of operation, Holth's extralimbal tangential punch forceps sclerectomy is preferred in chronic glaucoma. By this method the risk of late infection is reduced. A smooth scar with normal tension is quite common after this operation.

The routine taking of the pressure curve is described and a brief outline of the technic of Holth's operation included.—*International Clinics, December, 1927.*

NECROLOGY

Galen Murray Woodcock, Bangor, 1852-1928

A most distinguished member of our Association, and its President in 1910, Dr. Woodcock died February 17, 1928, suddenly, after a short illness. The son of Jonas Gurnee and Sarah Savage Woodcock, he was born in New York City, July 2, 1852, educated in the common schools, and after a short term in the New York College, he entered the Medical Department of the University of New York in 1870, and was in 1873 graduated with the Mott gold medal and a certificate of honor. He acted then as externe in the Eastern Dispensary in that city and there learned how to combat smallpox, a lesson useful to him in later life.

In June, 1875, he married Jane Christian, daughter of H. B. and Mary Jane Christian, and settled in South Brewer for a few years, then moved back to New York, but at the earnest solicitation of former patients he settled in Bangor in 1882, for life. He made himself felt at once as an able man and physician, was appointed to the State Board of Health, State Board of Registration, and was at the head of a Commission to stamp out two epidemics of smallpox in Maine, having at one time over one hundred and fifty virulent cases in Bangor and vicinity.

He attended medical conventions often, was President of the County and of the State Medical Associations, did much to found the Eastern Maine General Hospital, served long on its staff,

and during the late war was a man of force on the Advisory Board of Medical Examiners. He wrote many medical papers of value, and was posted on every medical advance. His presidential address was a model, with themes on preventive medicine, medical inspections and examinations, and ended with a review of what the Association had accomplished. He was a scholar, a gentleman, a keen observer of symptoms, and a careful medical adviser in whom the people placed high trust. He wrote remarkable letters, and never failed to answer questions so put to him. In his advancing years, when asked what he would do if he lived life over again, he said that he would, for choice, go into medicine again, as the best chance to do the greatest good as a man and as a citizen.

We part with our former President with keen regret. He is survived by a widow and children, including two sons in the profession.

J. A. S.

Jane Lord Hersom, Portland, 1840-1928

One of the early women physicians of Maine, Dr. Hersom, the widow of the once well-known Dr. Nahum Alvah Hersom, of Portland, died March 29, 1928, at the advanced age of more than eighty-seven years. She was born August 6, 1840, in Sanford, the daughter of Samuel Lord and Sophia Hight Smith. Her family moved in her early life to Springvale, and from that town,

after being a teacher in the public schools, she married Dr. Alvah Nahum Hersom and came to live in Portland for the rest of her life. Her husband, an early specialist in nasal diseases, was famous for a successful removal of a nasal sequestrum, and in 1881 had just arrived in Europe, for going on with his studies, when he suddenly died there. His widow then studied medicine and obtained her medical degree at the Woman's Hospital School of Medicine in Philadelphia in 1886.

Settling in Portland, she soon obtained an excellent clientage amongst former patients of her husband, and continued it for many years, until compelled by age to rest. Her powers of diagnosis were excellent, and her knowledge and choice of remedies felicitous. She wrote papers of value, was active in charitable and municipal labors of the women of the city and of Maine, and is survived by a daughter and a grandson.
J. A. S.

COUNTY NEWS AND NOTES

Penobscot County Medical Society

The May meeting of the Penobscot County Medical Society was held on Tuesday, the 15th, at the Bangor State Hospital, Dr. C. M. Thomas, the President, presiding.

Minutes of April meeting read and approved.

Dr. H. S. Babcock, Castine, a member of the Hancock County society, was elected a member of this society also.

Moved and seconded that the Board of Censors have authority to conduct clinics in connection with the regular meetings if they so desire.

The offer of Parke, Davis & Co., to show a moving picture at a special meeting of the society in June, was declined.

After dinner an instructive and interesting clinic was given by Drs. C. J. Hedin, E. W. Russell and M. E. Witte, of the State Hospital Staff.

Forty-four members were present, as follows:

Drs. C. M. Thomas, C. P. Thomas, F. D. Weymouth, Brewer; R. L. Mitchell, Carmel; H. C. Knowlton, Hampden; L. H. Smith, Winterport; H. G. McKay, Howland; N. R. Cook, O. R. Emerson, Newport; J. J. McVety, Corinna; C. E. Blaisdell, South Brewer; H. E. Snow, Bucksport; W. J. Hammond, Dexter; J. Lezberg, Kenduskeag; H. W. Sampson, C. J. Hedin, L. F. Wright, J. B. Woods, C. S. Philbrick, H. W. Johnson, E. L. Herlihy, J. L. Johnson, M. C. Moulton, S. S. Silsby, Daniel McCann, D. A. Robinson, H. E. Thompson, M. E. Witte, L. H. Ford, J. F. Starrett, H. M. Goodwin, A. K. P. Smith, W. R. Gumbrecht, A. Ducharm, Barbara Hunt, A. E. Small, W. S. Purinton, H. W. Osgood, E. S. Merrill, E. W. Russell, A. Woodcock, J. F. Cox, B. L. Bryant, H. C. Scribner, Bangor.

H. C. SCRIBNER, *Secretary*.

NOTES

First Unit of \$40,000,000 Medical Center to Be Opened in March after Seven Years of Planning and Construction.

A few days after the official opening day, on March 14, 1928, when the new Presbyterian Hospital building, at the Medical Center in New York, will be open for inspection by the medical authorities, the Presbyterian Hospital of New York will admit patients to wards and private rooms, and outpatients to the Vanderbilt Clinic. This building, the tallest hospital structure in the world, in which are housed the Presbyterian Hospital, the Sloane Hospital for Women and Squier Urological Clinic, has an ultimate bed capacity of 1,177.

A few days before this date, Anna C. Maxwell Hall, the residence of the Presbyterian Hospital Training School pupils, will be first occupied by the incoming class of about 50 students. This is a fifteen-story, H-shaped structure, having living quarters for 360 pupil nurses, an individual room with running water for each pupil nurse. A large swimming pool and recreation hall are features of the residence.

Council Passed

The notable success of many pharmaceutical products which have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in "New and Non-official Remedies" recommends not only the plan itself, but the wisdom of the medical profession in selecting these reliable "Council Passed" remedies for daily use.

Among the medicinal chemicals now being widely used are such "Council Passed" products as Ephedrine Hydrochloride, Neocinchophen, Butyn, Metaphen, Butesin Picrate, Anesthesin, Chlorazene, Amidopyrine, Procaine and Neutral Acriflavine, all of which are described in the recent edition of "New and Non-official Remedies."

These remedies are the result of research and clinical study. They have been announced in our pages and are worthy of further investigation on the part of our readers.

WANTED—We have several well-trained practical laboratory technicians with additional training in physiotherapy graduating from our school of public health May 15. Physicians, hospitals, clinics and health departments desiring such service can secure it by writing immediately.

Address, Dr. L. H. South, Director Bureau Bacteriology, Kentucky State Board of Health, 532 West Main Street, Louisville, Ky.

THE JOURNAL

OF THE

Maine Medical Association

Published under direction of the Council of the Maine Medical Association

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MAINE PUBLIC HEALTH ASSOCIATION

(In this issue of the MAINE MEDICAL JOURNAL, through the courtesy of the Editor and Council are various reports of the staff members of the Maine Public Health Association, covering its 1927 activities.)

Report of Field Secretary

After several years of health educational work in various counties of Maine, I became affiliated with the active staff of the Maine Public Health Association January 31, 1927, as Field Secretary. The work has been a combination of organizing for town appropriations, arranging for special drives, appointing committees, soliciting memberships, making personal collections, planning for seal sales, and stressing, above all, throughout Maine the fact that public health work is worth while and of inestimable value to the state's citizens, young or old.

The Maine Public Health Association is incorporated as an "educational institution" and is rightly named. The public in general is beginning to desire to learn much along health lines, as is evidenced by the number of intelligent questions pertaining to health which are asked our staff members. How

conscientiously and with what interest the boys and girls adopt right health habits and maintain them is demonstrated in Miss Buck's report, which follows. This means that health education is proving itself, and the establishing of public health nursing services is meeting with the approval of the citizens, who are willing to give of both time and money when convinced of the real value rendered by the work.

This spirit of co-operation has been evident all through the year, and especially regarding the town appropriation. At the Legislature in 1925, through the efforts of Arthur Tiffin, Treasurer for the Maine Public Health Association, a law was passed making it legal for towns to appropriate funds for public health nursing. Working on this basis, the selectmen in the towns of Penobscot, Somerset and York Counties were asked to insert an article in their respective town warrants: "To

see what sum of money the town will raise to provide for the services of a public health nurse." With the exception of two towns, the selectmen were willing to co-operate by incorporating the article in the warrants. Through the town appropriations in these three counties more than \$4,000 was raised, while Norway, owing to Mrs. Anderson's able work, voted \$2,000 for its own nurse, who functions under M. P. H. A. supervision.

The funds raised by a vote of the citizens of a town are utilized in that town for public health nursing and health education. This covers various phases—emergencies, epidemics, school inspections, follow-up work with special cases, tuberculosis, bad tonsils, etc., diagnostic clinics of various kinds, work with mothers and babies, health talks in clubs, farm bureaus, granges, etc. All M. P. H. A. nurses are registered, besides having received special training in public health work. The nursing and health education program carried out by the Maine Public Health Association's nurses was submitted to the State Department of Health and the Maine Medical Association, and was formally approved and endorsed by both organizations. For further information regarding the work of our nurses I refer you to Mrs. Anderson's report, which is in this issue of the JOURNAL.

Special drives were carried on in Franklin, Somerset, Hancock and Penobscot Counties, owing to the fact that when the services were first established in these sections sufficient funds were not available to maintain them.

As the value of the work is demonstrated, the citizens appreciate it and support it. A total of \$6,916.21 was the result of these four drives, and more important than the mere money was the evident interest and co-operation exhibited by the residents of these communities in wiping out the old debts, continuing the services of the nurse and beginning 1928 with a clean financial standing. In the above named counties, with the exception of Hancock, committees were appointed to raise the necessary funds, and the willingness with which the citizens agreed to take on this extra duty showed how keenly they, personally, realized the benefit derived from the nursing service. In Hancock County the summer residents were very generously inclined toward continuing the service, and responded very willingly when the appeal was made to them.

A series of tag days were conducted at various fairs, and also at Old Orchard. The tags were attractive, being cut-outs of the State of Maine and bearing the slogan, "We want health." More than \$600 was brought to the treasury through the sale of the tags, which means that nearly 6,000 Maine people gave their "bit" for health work during their holiday.

The membership in the Maine Public Health Association is \$5.00 per year. One hundred and sixty-seven friends of health joined in 1927, thus showing their desire to make an investment with us and that they endorsed our activities.

Some time was spent in Waldo

County, where a splendid chest clinic was held under the auspices of the M. P. H. A., the Red Cross and the State Department of Health. The citizens were interested and responsive, and some substantial gifts for our state-wide work were received.

The larger cities of Maine were visited. Although maintaining public health nurses of their own, in many cases, the residents were quickly interested in our plans for health education for the more rural communities, and demonstrated their desire to assist by making contributions to our work. These contributions from city friends amounted to more than \$2,000. Many corporations and companies made donations, as well as individuals.

During the last week in October preparations were begun for the Christmas health seal and bond sale. Mrs. Harriet Fenderson and Mrs. Harvey Granville were engaged to assist in certain sections of the state. Seventy-eight schoolrooms were visited and brief health talks given, stressing tuberculosis prevention and explaining the important part taken by the little Christmas seal in this nation-wide campaign for eliminating the "Great White Plague." At the end of the year returns were coming in which indicated a record-breaking sale in Maine. As Mr. Thurber had been granted a six months' leave of absence, commencing the latter part of October, we were without his experienced leadership during the seal sale.

During the year we have conferred with the State Department of Health, with the State Department of Education, the Maine Medical Association, the various county medical societies, the Red Cross and other organizations. Many pleasant and profitable interviews have been held with representatives of these various organizations. Our annual meeting was held December 9th, with a good attendance.

To all who have co-operated in any way to make the year's work a success, I extend gratitude and hearty thanks. A special word of appreciation should be given to Mr. William Bingham, 2d, of Bethel, Mrs. J. C. Stodder, Bangor, the Great Northern Paper Company, and Mrs. E. S. Woodman for their generous contributions, also to the Maine Central and the Bangor and Aroostook Railroads for their co-operation in giving free transportation to our nurses and field workers. When I see, as I so often do in my state-wide travels, boys and girls who have had defects corrected through the work of our nurses, my first thought is: "Through the generosity and kindness of our friends, the Maine Public Health Association has been able to remove physical handicaps in many cases, thus giving the younger generation a better chance to develop into healthy, happy, strong men and women for Maine's future."

Respectfully submitted,

ALICE H. MCGOULDRIK,
Field Secretary.

Report of Child Health Education Service

There are three phases of health education, namely, examination or inspection, follow-up work and the teaching of health habits.

My phase is the third phase of the health education program—the teaching of health habits. The health habit program which is most universally used in the elementary schools is the Modern Health Crusade. The Modern Health Crusade is the health project included in the physical education course outlined by the State Department of Education. The pupil or class performing simple daily health chores is thus enabled to do better school work. This makes the teacher's work easier. The child who is ailing, or who is careless about matters of personal hygiene, is not nearly so good a pupil as one who observes the fundamental things in good health, covered in the chores of the Modern Health Crusade, and in addition to making the teacher's work easier, we are helping to lay a foundation of health for Maine's men and women of to-morrow. The importance and value of a good health education program cannot even be estimated.

The Modern Health Crusade is used in every county in the State of Maine, in every state of the United States, and in eight or ten foreign countries. During the past four years, Maine has stood high in this health habit program. Pennants are awarded to schools in which 100% of the pupils perform a certain number of health chores, covering a

period of twelve weeks. These pennants are awarded all over the United States, by the National Tuberculosis Association, under which the Maine Public Health Association functions and with which it is affiliated.

For the past four years, Maine has stood second in the United States in proportion to her population, in the number of national pennants won. The State of Iowa has held first place for several years. In the school year of 1926-27 Maine failed to win first place only by the slender margin of seven-millionths of one per cent. The winning counties are as follows: Androscoggin, 16; Aroostook, 60; Cumberland, 20; Franklin, 10; Hancock, 31; Kennebec, 27; Knox, 12; Lincoln, 25; Oxford, 10; Penobscot, 21; Piscataquis, 28; Sagadahoc, 5; Somerset, 16; Waldo, 13; Washington, 6; York, 17; making a total of 317 national pennants. Number of pennants won in previous years: 1922-23, 7; 1923-24, 48; 1924-25, 130; 1925-26, 280; 1926-27, 317.

We have also an elementary school health program which may be used to supplement work of the Modern Health Crusade.

Many of the towns in Maine have no physician, and many of them are miles from a physician. In most places the school physician is paid only a small sum for his services. They have a big practice and long drives—the counties are large. It is not possible for the nurse to reach each school every year. The nurse and the doctor have little time to give to health talks or to do all

the follow-up work. This falls on the teacher. I help her with the follow-up work, with the health habit program which she already has, or if she has no health habit program, help her to make one that will fit her particular needs. Many of the towns do not have the services of either a school physician or a school nurse. Many physical defects have been discovered on my visits to schools, and through the co-operation of superintendent, teacher and parents, defects have been corrected.

CLEAN MOUTH CAMPAIGN

In May, 1926, a "Clean Mouth" campaign was inaugurated in the schools of Maine. Letters were written urging the pupils to make an effort to have the necessary dental corrections made as early as financial conditions would permit. Suggestions were made as to how the child might obtain the money to pay for dental corrections.

Two certificates were offered at this time. One to schools in which 50% or more of the children had all the necessary dental corrections and 100% certificates to schools in which all of the pupils had the necessary dental corrections. It is often difficult for parents to get their children to go to the dentist. The contest idea appeals to the child. He goes to the dentist because it is the fashionable thing to do—all the children are having their teeth attended to.

The response to this campaign was gratifying. In June, 1927, thirty-three schools were presented with 50% certificates. 100% certificates were presented to the North Open Air School, Mrs. Effie Graffam, teacher; the Casco Open

Air School, Portland, Mrs. Beulah Pressey, teacher. Much credit for this achievement is due these two teachers and Mrs. Amy Dillon, who has charge of the nutrition program in the open air schools. The 100% certificates were also awarded to the E. K. Sweetser School, J. Allen Whipple, teacher; Shawtown School, Miss Madeline Barter, teacher; School No. 13, Miss Helen Powell, teacher, all of Cumberland Center. Credit for this achievement is due the Cumberland Center Parent-Teacher Association and the Cumberland County Public Health Association, through the use of their Mobile Dental Clinic.

In October of this year, "Clean Mouth" letters were enclosed in the preliminary programs which were sent to the 6,000 or more Maine teachers. These letters urged the teachers to make an effort to interest the pupils in their school in going to the dentist. Splendid results are being obtained through this appeal. Several schools without the aid of a nurse or dental clinic, through the efforts of an interested teacher, have already obtained 100% "Clean Mouth" certificates. The 50% certificates are being awarded in all sections of the state, even among the islands.

Health talks were given during the school year to grade and high school pupils, to normal school students, to clubs, parent-teacher associations, at teacher's meetings, etc. Health talks were also given at the following summer schools: Gorham, Farmington, Castine, Machias and Bates College.

THE "SIX-POINT" CHILD

The new feature of my work this year has been the "Six-Point" child program. While this work has been handled by our nursing services through our county and local nurses in their respective territories, I am able to carry the message to the sections of the state that do not have the services of the nurse.

What is the "Six-Point" child? A "Six-Point" child is one who measures up to the minimum standards as indicated by a physical inspection of six points.

Why have a "Six-Point" standard for children? An analysis of physical inspection of school children shows that most defects are listed under the headings of malnutrition, defective vision, impaired hearing, abnormal throat conditions, nasal obstruction and defective teeth. These defects, if not corrected, seriously hamper the child's progress in school and may produce a harmful lasting effect on health later in adult life. If we correct these defects in childhood, we are safeguarding the health of future citizens and the prosperity and well-being of our nation. The child in good health is a better pupil. The man or woman in good health is a better citizen.

How can we interest the pupil in becoming a "Six-Point" child? To encourage our pupils to strive to become "Six-Point" children, the Section of Public Health Nursing and Child Health Education of the Maine Public Health Association will furnish "Six-Point" buttons which may be awarded May 1st, National

Child Health Day, to all children who were "Six-Point" children through the school year, also to all children who have had defects corrected during the year, thus placing themselves in the group with "Six-Point" children.

Pictures will be taken of "Six-Point" children in each community and given to local newspapers for publication, with names of children in the group. Local picture houses will be asked to show these pictures and county fairs will also use them in health exhibits.

County fair officers will be asked to give admittance to fairs to children who show the "Six-Point" button. These awards tend to strongly encourage the child and parent to have corrections done.

ABBIE M. BUCK, *Supervisor,
Child Health Education Service.*

Report of the Three-Quarter Century Club

The third annual meeting of the Three-Quarter Century Club was held at Deering Oaks, Portland, August 31, 1927. Shortly before noon over 2,000 persons were gathered. Of these more than 1,500 had registered as members or guests of the club.

While none of the centenarians were registered as present, there were a large number over 90 years of age, and 67 couples who have been married over fifty years registered to obtain the gold tags of this class. Dr. and Mrs. H. B. Pulsifer, of Auburn, were the oldest couple present. They have been married 66 years, Dr. Pulsifer being 92 and Mrs. Pulsifer 90 years old. Mr.

W. W. Kemp, the President, opened the meeting. At the business meeting, Mr. Henry Lord, of Bangor, was elected President; Mr. George C. Wing, Sr., of Auburn, Vice President; Albert M. Dunbar, of Waterville, Secretary; W. W. Kemp, Portland, Mrs. Maria Fuller, Augusta, and H. F. Kalloch, Tenant's Harbor, members of the Executive Committee.

There were 1,600 deaths during the previous year.

It was resolved to hold the meeting for 1928 at Bangor.

The President, Mr. Henry Lord, called a meeting of the Executive Committee to be held at the offices of the Public Health Association at Augusta, October 19, for the purpose of turning over to the Executive Committee of the club a complete roster of the club, together with other important records, and discussing plans for the future. The members present were the President, Secretary and Past President, W. W. Kemp, of Portland. The Executive Committee was presented by Mr. Thurber with a complete roster of the club, containing a list of members in every town in the state, alphabetically arranged. The total membership of the club at this time is 14,256. Mr. Thurber provided three copies of the roster. The Executive Committee was also presented by Mr. Thurber with a full report of the annual meeting of the club held in Portland on August 31st, also a complete record of its organization and of the proceedings during its existence.

It was voted that the President be

authorized to make such arrangements as may be necessary in connection with the next annual meeting. Mr. Dunbar moved that the committee express their sincere thanks for the different papers presented by Mr. Thurber, and their appreciation of his very efficient and successful efforts in the arrangements and the carrying out of the annual meetings of the Maine Three-Quarter Century Club. The meeting then adjourned.

Respectfully submitted,

A. M. DUNBAR,

Secretary.

Annual Report of Supervising Nurse ORGANIZATION

The work covers the following counties: Penobscot, Somerset, Piscataquis, Franklin, Hancock and York, and local services in Dexter, Norway and Rumford, also unions in Flanders Bay and South Franklin County.

The service is general in type. The Maine Public Health Association is the only organization maintaining a nursing service in the state available on a county basis, attempting, as far as is possible, to give all types of public health nursing.

Early in the year the nursing staff, in conference, drafted the following program for the year:

PROGRAM

Infant and Pre-School Children

1. An attempt will be made by each staff nurse to be responsible for, as a minimum, twenty "Well Baby" conferences in her county.

2. In local services the permanent

establishment of "Well Baby" conferences weekly or semi-monthly.

3. Co-operation with all physicians in teaching mothers, in the homes, proper methods of feeding and care of babies.

4. Pre-school conferences in as many localities as possible, as early as May or June, in order to give parents opportunity to correct defects before child enters school.

School Program

1. When medical inspection is employed, to give assistance in conduction of examination, record keeping and follow-up. To make physical inspection when no physician is available.

2. To give assistance to teachers in formulating a health program.

3. To exercise watchful supervision when in schools for purpose of detecting symptoms of communicable diseases.

4. To offer assistance to health officers in prevention of epidemics.

5. In towns desiring dental clinics, to give all assistance possible in organization and carrying on such clinics as a part of their school health program.

6. To submit for consideration this year to superintendents of schools a health program for high schools, and to assist in carrying out any phases of this program that they may decide to adopt.

Tuberculosis Nursing

Assistance to physicians and State Department of Health and sanatoria of the state in home calls, for the purpose of giving instruction in all cases which are reported through these various agencies.

General Program

That of the Maine Public Health Association.

Health Education

1. "Six Point" child campaign.

2. Co-operating with the Health Education Director in furtherance of "Clean Mouth" campaign and Modern Health Crusade work.

3. Preparation of posters in grammar school grades for exhibits at county fairs this coming summer.

4. Teaching of home hygiene classes.

5. Demonstrations and talks before farm bureaus, clubs, or any groups desiring health talks or demonstrations.

6. Co-operation with all organized groups in child health programs during National Child Health Month.

RECORDS

My first work as supervisor was to plan new nursing record forms and to make the nursing as uniform in each service as possible. These records are now in use. We will, at the end of the year 1928, be ready to give more accurate statistics on our work; also actual figures as to cost of maintenance of service, as worked out from daily records of each staff nurse.

CONFERENCES

Eight nursing conferences have been held during the year. In the summer months they were conducted in the various counties and were open to the public. These have proved to be of great value and have helped the nurses in solving many problems.

Two special features of the program

this year are a careful listing of our children who are contacts with tuberculous patients, also children who are found to be more than 10% under weight. Special attention is given to these cases from a nutritional standpoint by conferences with parents, and assistance is also given in arranging a special home program for these children. The "Six Point" child campaign was formally adopted as a part of the nursing program at the beginning of the school year. "Six Point" buttons and certificates are given all children who meet minimal health requirements on posture, weight, throat, teeth, vision and hearing.

NEW AFFILIATIONS

Affiliation was completed with a newly organized service for Norway early in the year. A nurse was placed there in July, and at the close of the year the service was running smoothly, with an enthusiastic committee behind it, and a yearly budget assured through town appropriation.

At the close of the year plans were completed for a five-town nursing service in Southern Franklin County, covering Carthage, Chesterville, Jay, Weld and Wilton.

With the resignation of Mrs. Nina Mooers, R. N., who has served so long and faithfully as public health nurse in Piscataquis County, it was decided to abandon the old plan of a county association. In August it was voted to affiliate with the M. P. H. A., and a new nurse was installed in October.

CLINICS

Chest Clinics

Three chest clinics have been held this year, one in Belfast for Waldo County, one in Ellsworth for Hancock County and one in Limerick for York County. A total of 207 patients were examined at these clinics. The diagnosis was referred, with case history, to family physician and assistance offered by field nurses to patients, if family doctor desired it, in securing sanatorium treatment, or assistance was offered with taking treatment at home.

Dr. Lester Adams, Superintendent of Hebron Sanatorium, and Dr. E. H. Drake, chairman Section of Tuberculosis and Heart, assisted by Dr. Charles Sylvester, of Portland, as chief diagnosticians, have worked with local doctors at these clinics, giving skilled assistance. In every instance valuable co-operation was rendered by Red Cross, State Department of Health, nurses, women's clubs and hospitals in making these clinics worth while to the communities.

The follow-up is perhaps the most valuable part of this work. Statistics available at this writing from one clinic show that of 68 patients examined for chest, 38 were found to be infected cases. Twenty-nine were visited by the field nurses within two weeks and offers of assistance to secure treatment, either at home or in sanatorium, was urged.

Diabetic Clinics

One was held at Farmington for Franklin County. Doctor Emery, of

Portland, assisted the local doctors with this clinic. Although only fourteen patients attended, they were all badly in need of attention and advice.

Dental Clinics

In Dexter, regular dental clinics were maintained. Local dentists gave dental examinations to 507 school children. Following this, 36 children were received at the clinics for free dental corrections.

Flanders Bay service provided a one-day dental clinic, at which 36 patients received treatment—the first of its kind in this territory.

"Well Baby" Conferences

For the convenience of the mothers, "Well Baby" conferences are largely held through the spring and summer months. Mothers are encouraged to bring babies for routine weighing and discussion of feeding problems. Babies showing abnormalities or physical defects or signs of illness are referred to their family physician for treatment.

During the year nursing records show a total of 139 "Well Baby" and pre-school conferences, with a total attendance of 1,233 babies or pre-school children.

Crippled Children's Clinics

Two clinics were held in Piscataquis County, one in Dover-Foxcroft and one in Milo. Dr. E. G. Abbott, of Portland, orthopedic surgeon, assisted at both clinics, working with local physicians.

One clinic has been held in Franklin County, at Farmington, at which Dr. E. G. Abbott was also the examining surgeon.

Doctor Frank Ober, of Boston, was chief diagnostician at the clinic in Hancock County. This was held at Bar Harbor Hospital. Doctor Ober brought his special nurse, who gave instruction to patients.

The following tabulations submitted at close of this report show our contribution to the state health work:

STATISTICAL REPORT—NURSING SERVICES

	Franklin County	Hancock County	Penobscot County†	Piscataquis County	Somerset County	York County	Dexter	Flanders Bay	Norway	Rumford	Waldo	Totals
Nursing Care												
a. No. patients	465	19		11	3	87	176	161	53	106		1081
b. No. visits	633	41		11	9	87	274	476	152	506		2189
Instruction												
a. No. patients	448	549		7	7	457	346	236	123	48		2751
b. No. visits	456	436		6	7	457	411	120	193	49		2086
Communicable Disease Investigation	22	173	3	11	7	133	39	20	30			438
Miscellaneous												
a. No. patients	328	490		5	189	569		40	36			1657
b. No. visits	396	352		5	201	569		120	88			1731
Visits to Schools	133	114	20	3	82	320	39	23	98			832
Pupils inspected by nurse	2053	1695	855	60	2092	6358	1871	447	582			16013
No. defective	637	1594		40	1395	3848	311	418	289			8532
No. 10% or more under weight	163	210		*	346	769	28	19	42			1577
Notices to Parents	946	1594	28	12	1643	3834	310	33	299			8789
Class Room Talks	57	101	32	5	29	319	26	22	58			649
Home Visits	144	249	2	2	18	203	80	100	29			827
Referred to physician	130	*		4		172	85	10	47			448
Referred to dentist	242	*		2		350	311	10	90			905
Referred to oculist	109	*		8		53	3	2	9			184
Accompanied to physician	27	5				13	11	18	1			75
Accompanied to dentist	11					3	30	63				107
Accompanied to oculist	5	2				15	11	20				53
Accompanied to hospital	23	11			7	40	10	53				144
Corrections Made	423	296			20	306	320	193	5			1563
No. "Well Baby" and Pre-School Conferences	22	16	1		11	19	34	2	34			139
No. New Patients	133	126	28		165	51	38	38	178			757
No. Old Patients	112	51				217	96					476
Orthopedic Clinic Held	1	1		2								4
No. attending	27	33		34								94
Chest Clinics Held		1				1					1	3
No. attending		83				23					100	206
Diabetic Clinic Held	1											1
No. attending	14											14
Dental Clinics Held							9	1				10
No. attending							36	33				69
Other Classes or Clubs	32	39		5	27	64	6	18	15			206
No. attending	648	1068		75	187	740	64	222	69			3073
Babies under supervision							79	56	83			218
Breast fed							34	34	34			68
Artificially fed							39	19				58
Mixed feedings							1	1				2
Weighed and Measured							29	62				91
Standard Weight for Height							6	11				17
Pre-School Children under Supervision								40	132			172
Total No. of Visits	1507	1319	30	26	221	1246	724	712	242			5027
Total No. of Patients Visited	1263	844	28	16	206	1246	561	173	435			4772

*No record. †No service given except for one month.

In closing, I wish to express my gratitude to all individuals, local and county committees, clubs and service organizations, that helped to make our program a success; to the members of the Maine Medical Association, who gave of their skilled advice and serv-

ices at our clinics; to Dr. C. F. Kendall and other members of the State Department of Health, who co-operated through the infant hygiene, dental and communicable disease prevention program: to Dr. A. O. Thomas, Commissioner of Education, who endorsed the

health program in the schools: to the Red Cross nursing services, who worked with us on our chest clinic program; to various municipal agencies, who gave free office rent: to the Bangor and Aroostook and Maine Central Railroads, which furnished free transportation—to all these we extend thanks and appreciation.

Theresa R. Anderson, R. N.,
Staff Supervising Nurse.

Annual Report Piscataquis County Nursing Service

October 15, 1927 - December 28, 1927

On taking up the public health work in Piscataquis County, the first objective was to obtain chairmen in the various towns for the sale of Christmas seals. By the first of December this was accomplished.

Up to this time the county had not furnished an office for their nurse. A satisfactory one was finally obtained in the Masonic Block in Milo.

While riding about the county, hunting for Christmas seal sale chairmen, the nurse became more or less acquainted in nine of the towns.

November 28, 1927, an orthopedic clinic was conducted in Milo, with Dr. E. G. Abbott as consultant.

No. of patients attending,	14
No. found normal,	2
No. found abnormal,	12

December 10, 1927, the second orthopedic clinic was conducted in Dover-Foxcroft.

No. of patients attending,	20
No. found normal,	0
No. found abnormal,	20

In the town of Atkinson three schools were visited before the roads became impassable. The following gives total work in that town:

Schools,	3
Visits,	3
Pupils enrolled,	68
Pupils in class room inspection,	68
Pupils referred to physician,	4
Pupils referred to dentist,	2
Pupils referred to oculist,	8
Notices to parents,	16
Class talks,	3
Sanitary inspections,	3

MISCELLANEOUS REPORT

Home visits,	26
No. of patients,	16
News items published,	20
Literature distributed,	6
Talks to Woman's Club, Guilford,	1

Respectfully submitted,

HELEN C. HUTCHINS,
County Nurse.

Annual Report Hancock County Nursing Service

January 1, 1927 - January 1, 1928

This service includes over 20,000 of the county's population and is given to the rural and small town parts of the county where the need is greatest and the work is hardest.

No. of visits of all kinds made by nurse, 1,402.

Visits for nursing care, 38.

Six hundred and forty-five (645) instructive health visits were made.

Five hundred and sixty-six (566) social visits were made. These include visits to doctors, dentists, epidemic in-

vestigation and control, social adjustments.

Five (5) patients were carried to the doctor, 11 taken to hospitals and 2 to sanatoria.

Sixteen (16) child health conferences were held, with an attendance of 334 babies and small children.

Nineteen (19) first aid classes were taught, with an attendance of 282.

Public health talks other than in schools numbered 20, with an attendance of 796.

Health exhibitions, such as fairs, etc., 4.

News items published in the interest of health, 89.

SCHOOL WORK

No. of visits to schools,	114
Pupils inspected,	1,695
Pupils with defects,	1,594
Pupils without defects,	101
Pupils with defects corrected,	278
Treatments in schools,	17
Health talks in schools,	104
Sanitary inspection, school buildings,	104
No. of children found in schools infected with tuberculosis,	98
No. of children with teeth defects,	1,159
No. of children with nasal obstruction,	683
No. of children with defective throats,	467
No. of children with defective vision,	469
No. of children under weight (more than 10%),	210
No. of children nervous and mental cases,	33
No. of children vaccinated against smallpox.	86

TUBERCULOSIS REPORT

A chest clinic was held in Ellsworth in May. (See Mrs. Anderson's report.) Eighty-three (83) persons were examined. The exposed school children were specially cared for. As a result of the clinic, 6 children were admitted to the sanatorium at Fairfield. Have had 15 adults and 7 children in the sanatorium during the year.

CRIPPLED CHILDREN'S REPORT

This included our crippled children's clinic at Bar Harbor Hospital, which was conducted by Dr. Frank Ober, of Boston, assisted by the doctors of the County Medical Society.

SOCIAL HYGIENE REPORT

Reported all suspicious cases to the State Department of Health, that they may be tested and provided for.

COMMUNICABLE DISEASE REPORT

The nurse helps to establish a proper quarantine, and keeps the children in school under her observation, excluding all suspects until after their incubation period has passed.

EDUCATIONAL REPORT

Two fair exhibitions have been arranged, the nurse meeting many children with their parents. Two hundred and fifty-five (255) children were weighed.

First aid classes are being taught in farm bureau, woman's clubs and Girl Scout meetings. Nineteen (19) of these classes have been conducted.

Talks on various phases of health at woman's clubs, farm bureaus, granges, etc., have been given.

DENTAL HYGIENE REPORT

One dental hygiene and corrective clinic conducted by the superintendent of schools, using the nurse's school cards as a basis for the selection of children, was held.

A county meeting of dentists, superintendent of schools and public health nurses, to discuss ways and means for better dental work, was held in Ellsworth. The State Dental Hygiene Division has co-operated with the county nurse in programs through the year.

Respectfully submitted,

ALICE T. BASSETT, R. N.,

County Nurse.

Annual Report Flanders Bay Nursing Service

January 1, 1927 - January 1, 1928

BEDSIDE NURSING

One hundred and seventy-three (173) patients have received nursing care. Four hundred and seventy-six (476) visits have been made to these patients. One hundred and nine (109) of these visits were made to obstetrical cases. Thirty-two (32) visits were made to the only typhoid case in the service. Thirty-two (32) visits were also made to a surgical case. (As it was necessary to visit this case daily, this case alone covers four hundred and forty-eight miles, as fourteen miles were covered every day for thirty-two (32) days.) The emergency cases were hemorrhage and injuries to woodsmen from cutting tools.

Types of cases receiving bedside care were:

Cancer, 4

Chronic,	11
Emergency accidents,	13
Erysipelas,	1
Fractures, sprains,	8
Grippe colds,	10
Heart,	7
Measles,	4
Obstetrical,	24
Pleurisy,	6
Pneumonia,	6
Post operative case,	8
Rheumatism	8
Surgical dressings,	30
Shock,	2
Tonsillitis,	3
T. B. cases,	15
Typhoid,	1

INSTRUCTION AND SUPERVISION

Two hundred and thirty-six (236) visits were made to the following cases:

Babies under one year,	56
Pre-school children (1 to 6 years),	40
Pre-natal cases,	24

INVESTIGATION

Investigations were made in reference to: Home conditions, skin diseases, whooping cough, T. B. contact. These visits totaled 20.

SCHOOL WORK

No. of schools visited,	23
Enrollment,	447
Individual inspection,	447
Defective,	418
Exclusion, skin disease,	6
Defects corrected,	173
Class talks,	22
Notices to parents,	33
Conferences with parents,	25
Sanitary inspections,	20
Treatments,	21

Health clubs,	13	Seal sale talks,	14
Home visits to school children,	100	No. attending, 200.	
Health plays,	4	Club meetings,	2

CORRECTIONS AND DEFECTS

Defective vision,	28	Home nursing classes,	2
Defective teeth,	187	No. attending, 8.	
Defective throat,	108	*Most of these cases were taken for throat correction.	
Under weight, 10%,	19	SUMMARY	
Over weight, 20%,	13	Bedside care to patients,	173
Posture,	136	Visits made to these patients,	476
Glands,	12	Instruction and supervision	
Defective vision corrected,	31	to	120
Defective teeth corrected,	86	Visits made to these patients,	236
Defective throat corrected,	76	Home visits to school chil-	
Referred to doctor,	10	dren,	100
Referred to dentist,	10		
Referred to oculist,	2		381 712

CONFERENCES AND CLINICS PROGRAM

	No. Clinics
Dental clinic,	1
33 children attending.	
"Well Baby" and pre-school child conferences,	2
38 children attending.	
Assisting with vaccination,	12
118 children vaccinated.	
Assisting with physical examination, boys 8 to 14 years old examined,	36
Taken to hospital,	*53
Taken to dentist,	63
Taken to oculist,	20
Taken to doctor,	18
Taken to clinics,	8
Conferences, T. B., at Hebron,	1
Dental conference,	1
Seal sale meeting,	1
Committee meetings,	2
Staff meetings,	6
Assisting doctor, operative cases,	4

Respectfully,
 MRS. H. A. HOLT, R. N.,
Public Health Nurse.

Annual Report Northern Franklin
 County Nursing Services

January 1, 1927	-	January 1, 1928
No. pupils inspected,		1,363
No. health talks,		57
No. pupils 20% over weight,		23
No. pupils 10% under weight,		108
No. pupils with vision defects,		133
No. pupils with throat defects,		228
No. pupils with teeth defects,		262
Seven hundred and fifty (750) bedside calls were made during the year.		
Several trips were made to Portland to take children to the clinics and to the hospital.		
Eight (8) baby conferences were held, also a diabetic clinic, with Dr. Emery, of Portland, as clinician. Fourteen (14) patients attended this clinic.		

An orthopedic clinic was held, with Dr. Abbott as clinician. Twenty-six (26) patients attended this clinic.

Health talks were given, and in some instances demonstrations were made at six farm bureau meetings, three women's clubs, four boys' and girls' clubs, and one grange.

The exhibit was maintained at the Franklin Agricultural Fair, as usual. Many thousands of pamphlets were given out, and the nurse was kept busy with individual consultations. The "House of Woe" and the "House of Health" occupied a conspicuous place at the exhibit and was the subject of much attention and comment by the people.

Respectfully submitted,

IRMA KNOWLTON, *Clerk,*

Franklin County Committee.

Annual Report Somerset County Nursing Service

January 1, 1927 - January 1, 1928

REPORT OF INFANT AND CHILD WELFARE WORK

No. of clinics held,	12
No. attending,	209

REPORT OF SCHOOL WORK

Schoolrooms visited,	85
Pupils given physical inspection,	2,468
Pupils with defects,	1,800
Number of defects,	2,201
Vision,	270
Eyes,	76
Ears,	23
Teeth,	930
Throat,	405
Nose,	53
10% or more under weight,	422

20% or more over weight,	7
Other,	15
Class room health talks,	36
Conferences with parents,	12
Home visits,	17
Sanitary inspection of school and grounds,	45
Corrections,	25

(Only a small group checked on this.)

Twenty-eight (28) health talks to adult groups were given.

Total number attending,	745
Health literature distributed,	380
News items prepared,	67

Special problems are constantly being presented and must be attended to. A few such cases have been taken care of during the past year.

One little boy received constant care for three days and three nights during a critical time, when other help was unavailable. It was surely a great pleasure to see this same child playing out of doors, about four months later, the picture of health.

A man stricken suddenly ill in the big woods far from home, in January, was safely accompanied to his home by the nurse. As the man was helpless on a cot, it was necessary to make the trip in the baggage car. A change of trains was necessary at one point, but the trainmen willingly gave their aid, and the patient suffered no discomfort.

An infant, eight days old, unable to move one arm, needed an X-ray picture to enable the physician to give the useless arm proper treatment. The baby was taken to the hospital, 35 miles away, the picture made and the child returned safely to its home the same

day. As a result, the arm is now normal.

Child Health Day

Child Health Day in May was celebrated in Skowhegan by a parade of school children attired in appropriate costumes and displaying health posters and banners. Many out-of-town children participated in this event. At the community house a fine program, featuring talks by prominent physicians, was attended by about 500 people. A beautiful outdoor pageant presented by the high school girls and demonstrations by the Boy Scouts were valuable additions to the events of the day.

First Aid Tent and Rest Room

A first aid tent and rest room was maintained for the four days of the Skowhegan fair.

Approximately 400 people visited the tent, 3 cases of illness were helped and 10 surgical dressings done.

A special exhibit, "The House of Health" and "The House of Woe," attracted much attention, as well as the health posters and literature which was on display.

Contact with other health workers is essential to nurses. The following meetings have proven very helpful during the past year: Staff Nurses' Conferences, 8; N. E. Health Conference, 2 days; Maine State Nurses' Convention, 2 days; Seal Sale Workers Institute, 1 day.

The annual sale of Christmas seals was launched in November in every town in the county. Several were solicited by mail from this office, 200 let-

ters being sent out for this purpose.

Respectfully submitted,

JULIA G. WILSON, R. N.,

County Nurse.

Report of Dexter Community Nursing Service

February 1, 1927 - January 1, 1928

The nursing service has been carried on for the past year by Claire Russell, R. N. Miss Russell resigned in December, and her resignation was accepted with regret. She showed wise judgment in meeting the various problems of her work and carried on the service in a very efficient manner.

This service is supported by the sale of Christmas health seals, which amounts to enough to run the work for six weeks. The rest of the budget is met by a town appropriation and such gifts as interested people make, plus a small sum which comes in where the nurse is paid as she makes a call on a sick patient.

The nurse has made 906 visits in homes. Thirty-seven (37) "Well Baby" conferences were held, at which 154 babies came for weekly weighing and inspection by the nurse.

The dentists of Dexter gave their services again and made a dental inspection of 600 school children in the grades. Nine (9) dental clinics were held. Thirty-six (36) school children were treated.

The statistical report is as follows:

BEDSIDE CARE GIVEN SICK PATIENTS	
To babies,	56
To pre-school children,	48

To school children,	58	Literature on maternity,	600
Pre-natal patients,	4	Literature on infant welfare,	575
Obstetrical patients,	22	Literature on communicable dis-	
Postpartum cases,	63	ease prevention,	575
Tuberculosis patients,	7	Literature, miscellaneous,	265
General cases,	85	Five (5) general health talks were	

INSTRUCTIVE VISITS

To pre-school children,	121	held, at which 45 babies were registered.	
To babies,	106	Patients taken to doctors,	10
To school children,	121	Patients taken to dentists,	29
Pre-natal patients,	30	Patients taken to hospital,	19
Postpartum cases,	10	Patients taken to oculist,	7
General cases,	13	In closing, the nurse and her com-	
School children,	52	mittee wish to extend their grateful	
For communicable diseases,	36	appreciation to the doctors, the den-	
For social service,	54	tists, the Sunshine Club, Good Will	

SCHOOL NURSING

Assisted school doctor with ex-	
amination of pupils,	536
Examination of hair for vermin,	75
Inspection of pupils by nurses,	1,260
Advised exclusion of pupils,	36

(These pupils were sent home from school because they had symptoms of scarlet fever, measles, chicken-pox, whooping cough, sore throat or vermin in head.)

Pupils weighed by nurse,	1,355
(Each pupil was weighed more than once.)	
Notices of defects sent to parents,	290
Class talks given rooms on health subjects,	24
Referred to family physician for treatment,	157
Home visits to school children,	82
Office calls for consultation,	44

HEALTH EDUCATION ACTIVITIES

News items prepared,	54
Literature on health given out,	1,540

Five (5) general health talks were given to adults, and 1 baby contest was held, at which 45 babies were registered. Patients taken to doctors, 10 Patients taken to dentists, 29 Patients taken to hospital, 19 Patients taken to oculist, 7 In closing, the nurse and her committee wish to extend their grateful appreciation to the doctors, the dentists, the Sunshine Club, Good Will Society, and the Red Cross, also the Brotherhood of Odd Fellows, who have made a substantial contribution in giving the nurse office room for a year.

Respectfully submitted,

DEXTER COM. NURSING SERVICE,
By THERESA R. ANDERSON, R. N.,
Nurse Supervisor.

Annual Report Norway Nursing Service

July 11, 1927 - December 31, 1927

Interest in a public health nursing service started in the Norway Woman's Club, and the members decided to recommend affiliation with the Maine Public Health Association.

At the 1927 town meeting the matter was brought before the citizens, and an appropriation of \$2,000 was voted, also the selectmen were authorized to appoint a committee. Members of the committee are: B. G. McIntire, chairman; Mrs. Bertha Noyes, secretary; Mrs. Elon L. Brown, treasurer; Fred S. Brown and Eugene N. Swett.

On July 11th, work was begun under the name of Norway Nursing Service. Mrs. Victorine Blanchard gave the use of her new Ford sedan. The Association sent to Norway the furniture from an office they were closing.

“Well Baby” conferences for weighing, measuring and disencsion were started at once. Seventy-nine (79) children below school age have made 178 visits to the conferences at the Nursing Service office, Norway Lake and Swift’s Corner.

Letters to parents, urging a health examination for beginning school children, resulted in the bringing of 27 to the nurse. Twelve (12) of these were taken by parents to local physicians for examination. There were 61 to begin school this year.

Visits to schools total 147. Individual inspection:

	High School	Grades
No. inspected,	169	434
No. defects found,	149	335
No. parents notified,	90	321

Almost half those inspected were plainly in need of dental care. Of high school students with defective teeth, 34 were at the time visiting the dentist. Other corrections of defects to date number 60.

From the beginning some nursing care has been given. With the end of December, 200 homes had been visited, nursing care being given 60 patients. Nursing visits total 290; other visits 292.

The first class in home hygiene and care of the sick was started December 19th, with 10 members enrolled. The course includes 12 two-hour periods. This class meets in the evening.

Respectfully submitted,
Bella Davis, R. N.

Annual Report Gardiner Public Health Center

July, 1926 - July, 1927

CHILD WELFARE

No. conferences held	29
No. attending	223
New, 24; Old, 119.	

DENTAL CLINIC

No. clinics held	27
No. attending	223
New, 53; Old, 170.	

SCHOOL WORK

Class room visits,	721
No. pupils inspected and re-inspected,	3,855
No. defects found,	579

	Defects	Corrections
Teeth,	214 (81 rep’t)	163
Vision,	207 (inc. 20/30)	20
Throats,	119	55
Hearing,	22	19
Skin,	14	13
Symptons nervous disorder,	3	

Total No. corrections,	290
Number weighings,	4,710
10% under weight,	103
Talks to pupils (health stories),	272
Home visits to school children,	324
Children to hospital at Portland,	3

PRE-SCHOOL CLINICS

No. held,	1
No. attending,	40
No. defects (throats),	5
No. corrections,	4

REPORT OF DISTRICT NURSE ASSOCIATION

Obstetrical visits,	260
Medical visits,	493
Surgical visits,	635
Contagious visits,	83

Office interviews,	108
Pre-natal visits,	91
Respectfully submitted,	
GARDINER PUBLIC	
HEALTH ASSOCIATION,	
<i>Nursing Service.</i>	

Annual Report Cumberland County Public Health Association

November, 1926 - November, 1927

The work we have stressed during the year has been the school examination for health in our rural districts.

The following is a report of school inspection in 11 towns: Scarboro, Pownal, Freeport, Bridgton, Yarmouth, Gorham, Cumberland, Westbrook (Parochial School), Windham, New Gloucester and Gray.

Visited and inspected the pupils of 86 schools, 136 rooms, as follows:

No. pupils enrolled,	3,798
No. pupils examined,	3,589
No. pupils 7% or more under weight,	823
No. pupils 20% or more over weight,	93
No. pupils with defective vision,	458
No. pupils with defective hearing,	40
No. pupils with defective teeth,	2,092
No. pupils with enlarged tonsils,	716
No. pupils with pediculosis,	34
No. pupils with defects,	2,679
No. pupils without defects,	930
No. notices sent parents,	2,679
No. pupils unvaccinated,	1,992
No. defects corrected,	715
No. pupils excluded from school,	48

Pediculosis, 34; skin disease, 14.

Health talks given to pupils, 65

Sample soap, sample tubes of tooth paste and health literature distributed to the pupils.

REPORT OF MOBILE DENTAL CLINIC
Clinic held in three towns, 7 schools; total number of days, 18.

Report of work accomplished:

Pupils treated,	234
Cleanings,	233
Silver fillings,	568
Cement fillings,	11
Teeth extracted under gas or ether,	154
Teeth extracted with novacaine,	77

The Cumberland County Public Health Association furnished all material used, the use of the "outfit" and the services of their nurse to assist the dentist, and the towns or some interested organization paying the dentist's fee.

REPORT OF PRE-SCHOOL CLINIC AT CUMBERLAND

The Cumberland County Public Health Association held a pre-school clinic July 26, 1927, in the town hall at Cumberland Center. Dr. Henry Hanson was the examining physician and very generously gave his services, Miss Mary G. Price, the County Nurse, assisting at the clinic.

No. of children examined,	26
No. with defects,	14
No. without defects,	12
No. 7% under weight,	2
No. 20% over weight,	0
No. with defective teeth,	7
No. with enlarged tonsils,	4
No. with diseased tonsils,	0
No. with enlarged glands,	4

There were no serious defects found, and the general health of the children was very good.

Fifty-five (55) home visits were made to interest mothers in sending their daughters to camp. These girls were sent from the towns of Gorham,

Cumberland, Yarmouth, Scarborough and Portland. These were girls between the ages of 12 and 18, and would not have had such a vacation if this opportunity had not been made possible.

The Cumberland County Public Health Association voted \$100.00 for this phase of health work.

EYE CLINIC

There was an eye clinic held at the Dunstan School, Scarborough, January, 1927, by Dr. S. J. Beach, who gave a vision examination to 16 children, prescribed glasses for 13 and deferred glasses (for the present) for 3. Eleven (11) pupils had their prescriptions filled. Twenty-five (25) visits were made to these schools and to the homes of the children by the nurse.

The Woman's Literary Union presented us with \$50.00 as a nucleus for our eye clinic fund.

MISCELLANEOUS

Attended and gave health talks at four farm bureau meetings, also attended three parent-teacher association meetings.

Our nurse made 400 calls in the interest of school children, pre-school children and infants.

Forty (40) children were brought to the different clinics in Portland and relieved of suffering and future ill results.

In a number of cases we have sent well water used in the rural schools to the State Department of Health for analysis.

Mrs. E. L. PICKARD,
Secretary.

Annual Report Central Penobscot
Public Health Association

February 7, 1927 - February 7, 1928

I have made 2,581 visits to 905 different patients as follows:

BEDSIDE CARE

Actual bedside care (total visits),	592
Babies under one year,	108
Pre-school children,	20
School children,	17
Pre-natal,	16
Obstetrical,	19
Postpartum,	72
Tuberculosis,	21
Medical,	135
Surgical,	184

INSTRUCTION AND DEMONSTRATION

Instruction and demonstration (total visits),	1,338
Babies under one year,	275
Pre-school children,	168
School children,	229
Pre-natal,	102
Obstetrical,	3
Postpartum,	79
Tuberculosis,	61
Medical,	279
Surgical,	142

OTHER VISITS

Social Welfare, to doctors, etc.,	651
Patients accompanied to or from hospitals, clinics, dentists, san- atorium or oculist,	71
Assistance in examinations of chil- dren in schools of Bradley, Milford, Costigan and Veazie, approximately,	300
Patients or babies registered at "Well Baby" conferences,	125

There is much necessary follow-up work of school defects. This is a very important preventive measure. There is a great need of free clinical advice and treatment.

Miss Dorothy Johnson, physical training teacher of the schools, gives her report as follows.

Treatment secured since September 30, in the first six grades:

Diseased teeth,	89
Corrected visions,	9
Pedicullæ,	5
Skin diseases,	2
Treatment for ears,	4
Typhoid cases,	2
Adenoids and tonsils,	2

FINAL REPORT

Total examined,	1,404
No. cases,	379
Tonsils removed,	187
Eyes fitted,	57
Notices sent,	1,025
Decayed teeth,	736
Diseased tonsils,	208
Impaired eyesights,	82
Impaired hearings,	50
Pedicullæ,	176
Cardiac,	13
Malnutrition,	59
Adenoids,	39
T. B. histories,	2
Glandular disturbances,	39
Kidney disorders,	2
Skin infections,	91
St. Vitas,	1
Orthopedic,	5

During the summer months I held weekly "Well Baby" conferences at City Hall.

I feel that intensive study and alleviation of tuberculosis cases, especially among the school children, is almost imperative.

The physicians and dentists and the optometrist have all given splendid help and encouragement.

In closing I wish to thank all who have given me excellent support, and to

extend my best wishes to the Association which makes this work possible.

Respectfully submitted,

LOUISE B. NICHOLS, R. N.

Annual Report Bangor Anti-Tuberculosis Association January 1, 1927 - January 1, 1928

As in previous years, educational work continued to be the fundamental principle of all activities of the Bangor Anti-Tuberculosis Association for the year 1927.

The sanatorium functions not only to relieve the sick patients, but teaches the care necessary for themselves and their contacts when they are ready to return to their homes.

At the York Street Clinic the watchword is "education," for the child examined and for its family, and the field of the Public Health Nurse enlarges with each new case or suspect that is discovered.

The Fresh Air School has become a contributing element in our constructive program, as concrete results now show the definite gains of the children who have benefited by the privileges offered to the undernourished child. In this branch of our service we are only handicapped by the limited accommodations from carrying forward a far-reaching benefit to the public welfare.

During the past year 34 patients were admitted to the sanatorium, and there were 41 discharges. Of the discharges, 11 were inactive, 14 improved, 2 unimproved, in 3 no evidences of tuberculosis found, 7 deaths and 4 transferred to other sanatoria. Twenty-six (26) of these discharges were for home treatment, and by keeping in close touch with these cases, we can report 14 who are doing well, with every evidence

of ultimately making a good recovery. Five (5) have resumed work, although of course it must not necessarily be of too strenuous a nature. Six (6) are not doing well, and there has been 1 death. The number of patients given treatment during the year was 54, some of them having been in the sanatorium from one year to eighteen months.

Miss Hopkins, the Association's nurse, began the year with 245 cases of tuberculosis on her list in Bangor, Brewer and South Brewer. Two thousand fifty-eight (2,058) visits were made to patients and their families. Sixty-one (61) new patients were discovered; 43 patients were sent to sanatoria, and 17 have died.

At our York Street clinic, 289 examinations on 71 patients were made. An average of 58 children came each Saturday to be weighed and measured. Twelve (12) children were referred to Dr. Ames for X-ray work on the chest.

With the co-operation of Miss Soule, of the State Department, who sent to us Miss Frances Nason, her nutrition worker, we started mothers' classes in nutrition, hoping in many cases to bring the children back to normal with the right food.

Our sanatorium is the only one in the state having affiliation with a training school for nurses, such as the Eastern Maine General Hospital is giving to its undergraduate nurses to train them in the care of tuberculosis. Very few training schools in the country have such an affiliation for the benefit of their students, and it should be regarded as an important asset to the community in line with the educational policy of the Bangor Anti-Tuberculosis Association.

Respectfully submitted,

MARY LOUISE ROWE,

Secretary.

Annual Report Washington County Anti-Tuberculosis Association

January 1, 1927 - January 1, 1928

No. schools visited,	138
No. pupils enrolled,	4,657
No. individual pupils inspected,	4,117
No. pupils defective,	3,720
No. without defects,	397
No. pupils with defects corrected,	528
No. notices to parents,	3,000
No. homes visited to school children,	302
No. class talks,	79
No. with defective teeth,	3,000
No. with bad tonsils,	350
No. under weight,	465
No. towns visited,	157
Classes on home nursing,	20
Maternity and infant classes,	7
Talked at Rotary Club,	2
Talked at Grange meeting,	6

VISITS TO TUBERCULOSIS PATIENTS

No. visits to patients (T.B.),	112
No. patients taken to sanatorium,	10
No. new T.B. patients for year,	11
No. patients died,	8
No. patients improved,	4

CONFERENCE AND INTERVIEWS

Conference and interviews with:	
Selectmen,	35
School superintendents,	13
Schoolteachers,	138
Physicians,	112

Respectfully submitted,

EDNA COCHRANE, R. N.,

Washington County Nursing Service.

Annual Report York County Nursing Service

January, 1927 - January, 1928

In April, 1927, a second nurse came to York County and the county was divided, one nurse taking the northern part and the other the southern. All of

the schools in the county were visited and the pupils given their annual inspection. Some schools were only visited once, while others received more calls.

A campaign for vaccination was put on in Kennebunkport, Wells and North Berwick, and over 300 children were vaccinated. This is the first time that this was attempted in the county, and it was a success.

The nurses attended a number of farm bureau meetings and gave talks, besides demonstrations for first aid.

Dr. George Coombs, Director of Social Hygiene and Communicable Diseases, gave health talks to some of the schools, and social hygiene talks to the boys and girls in the high schools.

Home hygiene classes were conducted in three high schools, besides two classes to adults.

In Eliot, a dentist, assisted by one of the nurses, examined the teeth of all the children in the Laura V. Dane and high schools.

Two fairs, Cornish and Acton, were attended and exhibits were given of the "House of Woe" and the "House of Health."

A chest clinic was held in Limerick, for the county, and 22 were examined—18 heart and 16 asthma.

A crippled child was taken to the Children's Hospital in Portland for treatment and when examined was found to be a diphtheria carrier. As this child was in a room with almost forty children, an epidemic was prevented.

A deaf child that was not making any advancement in a rural school was placed in the Deaf School in Portland and is now very happy in his new surroundings.

During epidemics, schools were given

special inspection, with the co-operation of the health officers, and in one town about 500 cultures were taken before the diphtheria carrier was found.

When schools closed, attention was given especially to the Child Health conferences. These conferences for children from one month to school age were sponsored by some local organization, such as Parent-Teachers' Association, Grange, Woman's Club, etc. These organizations made all arrangements as to time and place, securing a physician for the physical examinations and notifying mothers of young children. Some of the towns had never held such a conference. The response was very gratifying.

When schools began again in September the program of the "Six-Point" child was explained to the pupils, who were also weighed and measured, and in some instances given their annual 1928 inspection.

A large number of corrections of defects have been made, which involved the services of the nurses to accompany the children to and from the various hospitals. These corrections were for the most part the removal of abnormal tonsils and adenoids. There were also corrections of eyes, orthopedic defects, etc.

In co-operation with the Salvation Army, three children were given a two weeks' outing in the summer.

The following statistics give an idea of the extent of the nursing work in the York County service for the past year:

Nursing Care:

a. No. patients,	87
b. No. visits,	87

Instruction:

a. No. patients,	457
b. No. visits,	457

Communicable disease investigation,	133	Corrections made,	306
Miscellaneous:		No. "Well Baby" and pre-school	
<i>a.</i> No. patients,	569	conferences,	19
<i>b.</i> No. visits,	569	No. new patients,	51
Visits to schools,	320	No. old patients,	217
Pupils inspected by nurse,	6,358	Chest clinic held,	1
No. defective,	3,848	No. attending,	23
Class room talks,	319	Other classes or clubs,	64
Home visits,	203	Attendance,	74
Referred to physician,	172	Total number of visits,	1,246
Referred to dentist,	350	Total number of patients visited,	1,246
Referred to oculist,	53	Respectfully submitted,	
Accompanied to physician,	13	I. C. JOHANSEN, R. N.,	
Accompanied to dentist,	3	EDNA R. AVERY, R. N.,	
Accompanied to oculist,	15	<i>York County Public Health Nurses.</i>	
Accompanied to hospital,	40		

COUNTY NEWS AND NOTES

Aroostook County Medical Society

The annual meeting of the Aroostook County Medical Society was held at the Court House, Houlton, June 12, 1928, with the following program:

10.00 A. M., business session. "Cat-aract," Dr. C. E. Sunder, of Woodstock. "How Biologicals Are Made"—a movie film by John Schriever.

1.30 P. M., dinner at the Snell House. "The Relation of Iodine to Goiter" (illustrated by slides), Dr. R. B. Cattell, of Lahey Clinic; a paper by Dr. L. G. Banton, Island Falls. Dr. W. E. Sincok related some of his experiences on his recent trip around the world. President's Address, Dr. P. L. B. Ebbett.

P. L. B. EBBETT, *President.*
JOHN G. POTTER, *Secretary.*

Androscoggin County Medical Society

A combined meeting of the Androscoggin County Medical Society and the Androscoggin Valley Dental Society was held May 25, 1928, at the DeWitt Hotel in Lewiston, dinner being served at 8 P. M., followed by a paper on "Medico-Dental Aspect of Focal Infection," by Dr. Geo. H. Wright, of Boston, Professor of Oral Medicine at the Harvard Medical School and Consultant, Oral Surgeon Massachusetts General Hospital and Eye and Ear Infirmary.

HENRY SPRINCE, M. D.,
Secretary-Treasurer.

WANTED—We have several well-trained practical laboratory technicians with additional training in physiotherapy graduating from our school of public health May 15. Physicians, hospitals, clinics and health departments desiring such service can secure it by writing immediately.
Address, Dr. L. H. South, Director Bureau Bacteriology, Kentucky State Board of Health, 532 West Main Street, Louisville, Ky.

NEW AND NON-OFFICIAL REMEDIES

NEW AND NONOFFICIAL REMEDIES, 1928, containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on Jan. 1, 1928. Cloth. Price, postpaid, \$1.50. Pp. 489 XLIX. Chicago. American Medical Association.

This book is the work of a distinguished organization, the Council on Pharmacy and Chemistry of the American Medical Association, which some twenty years ago was founded to clean out the Augean stables of proprietary medicines. The Council's plan was and has been the publication annually of a book containing descriptions of those unofficial preparations which after careful investigation have been found worthy of recognition and consideration by the medical profession. Such has been the devotion of the Council members, who serve without remuneration, and such the recognition achieved by their work that today the book describes all the new proprietary products which have a scientific base and which give promise of therapeutic usefulness. The physician who best safeguards his own interests as well as those of his patient will give no consideration to any proprietary medicinal agent which is not listed in *New and Nonofficial Remedies*.

The book is conveniently arranged for reference: each preparation is classified, and each classification is preceded by an authoritative and up to date discussion of the composition, actions, uses, and dosage of the medicament involved. Annually the book is carefully scrutinized and revised to ensure its being in the forefront of medical progress. Products that have been admitted are reexamined at stated intervals to determine if they are keeping their promise

of therapeutic usefulness; and new products are admitted as they are found acceptable.

Among the more important revisions this year are: the rewriting or recasting of the chapters on Medicinal Foods, Insulin, Arsenic Compounds, and Iron and Iron Compounds; revision of the chapters on Ovary and Parathyroid to make them conform to the results of recent research; and revision of the names and standards of the acriflavine dyes. A noteworthy omission is that of all parathyroid gland preparations designed for oral administration, their lack of efficacy by this route having been conclusively demonstrated.

The following are some of the products which have been recognized during the past year and which are now included in the book: Neonol, a new barbitol compound; Mesurol, a bismuth preparation for use in the treatment of syphilis; Bromural, once omitted from the book, but now reinstated as a result of the manufacturer's limitation of therapeutic claims; a number of standardized cod liver oils; Ephedrine, an alkaloid with epinephrine-like properties, and its hydrochloride and sulphate salts; Amiodoxyl benzoate, the ammonium salt of orthoiodoxy-benzoic acid, proposed for the treatment of arthritis; Crotalus Antitoxin, an antisuakebite serum; several brands of erysipelas streptococcus antitoxin; and Anaerobic Antitoxin, and antitoxic serum for use against gas gangrene.

On account of the careful revisions and the current additions, *New and Nonofficial Remedies* is essentially a new book each year, indispensable to the physician who would keep up with the march of therapeutic progress.

THE JOURNAL

OF THE

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JULY, 1928

No. 7

THE PRESIDENT'S ADDRESS

By HERBERT F. TWITCHELL, M. D., Portland, Maine

Members of the Maine Medical Association:

We are living in an era of great scientific medical progress. The discoveries of the last fifty years have placed a vast amount of medical knowledge at our disposal. This has increased our responsibility to the public in the same proportion that it has widened our field of activity. It has necessitated a broader general and medical education, with increased time and expense for its attainment.

A degree of knowledge that would have satisfied the courts as "reasonable" a few years ago is no longer sufficient. Training in bacteriological, psychological, and biological processes, and laboratory methods, is now essential. The requirements of our profession today are so great, so mandatory, that we can give little time to secular matters and keep abreast of medical progress.

I am addressing two classes of practitioners—the general physician and the specialist. The dominant idea of the profession fifty years ago was the *practice* of medicine. The scientific spirit was dormant. The emphasis was on

the business of medicine as a practical service, which presaged the present day "gospel of health."

We are now more concerned with the application of the knowledge science has given us, knowledge that we must now thoroughly digest, in order to use most effectively.

For instance, we know something of the function and co-ordination of the endocrine glands, but have hardly begun to apply that knowledge. We know much of the physiology and chemistry of the digestive process; but how few of us arrange a specific scientific diet for our patients. We know some of the causes of premature arteriosclerosis and cardio-vascular troubles, but we are not giving sufficient attention to low salt, salt free, and protein regulated diets. There is much experimentation to be done, also, in bacteriological, protein, and pollen intoxication.

These are only a few of the subjects I might suggest to point the practical application of my thesis.

The art of medicine has heretofore gone ahead of the science. The older physicians were strong on the art, but

weak on the science of medicine, but now there is danger of the art being lost in our pursuit of the scientific side. Too much devotion to science and research is apt to be at the expense of our skill in handling the sick patient.

Allow me, therefore, to suggest to the specialist that the art of applying his knowledge is a useful, and often an essential, matter in his success. I would also admonish the practitioner that while his art comes first in his business, he should nevertheless remember that real advance in the treatment of disease has only come through scientific research. The most successful modern physicians—the shining lights of our profession—are those who happily combine these two branches of the healing art in their work. This requires good judgment as well as tact. Tact is largely a gift. Judgment is the fruit of knowledge.

Do not confuse information with knowledge. Information may be only a mass of inco-ordinated facts. Practical knowledge is the ability to group facts and to adjust their relativity so that we can apply them to sound reasoning.

Physicians are by nature and calling altruistic. We have in the past put too much stress, comparatively speaking, on what we owe the public. It is high time we let the public know what they owe to us. They should understand that the physician, needing all his time and energy for the work of his profession, should not be handicapped by impecuniosity, nor troubled by purely business matters, if he is to render his best services to his patients. All the comforts and many of the luxuries of life are essential to a clear thinking, active mind. When a physician loses

the enthusiasm of his calling, he becomes a mediocre practitioner.

In order to appreciate their debt to us, the people must know something, also, of the history and progress of medicine—our contribution to civilization. How shall we get these facts before them? By personal propaganda, by the aid of the press, and through the county societies.

First—The physician should instruct his patients. To do this impressively he must himself be familiar with the history of medicine, which, in itself, constitutes a liberal education.

Let me touch upon some of the high spots of medical accomplishment as suggestions for such propaganda.

In the last half century the death rate from tuberculosis has been cut in half. Yellow fever, cholera, and bubonic plague have been practically banished from the Western Hemisphere. Typhoid fever and malaria have been reduced to negligible figures. Diphtheria and smallpox have been robbed of their terrors. Infant sickness and mortality have been reduced in a remarkable degree. Moreover, the average death rate has been reduced from near twenty, to about twelve per thousand, and nearly sixteen years have been added to the average of human life. And we are still pressing on to new conquests. We stand to-day, as we ever have stood, a Perseus to deliver humanity whenever, like Adromeda, she lies helpless before that hydra-headed dragon — human disease.

But all these achievements have not been without cost to the medical fraternity. It has been a "Pyrrhic Victory." It has reduced the sources of our income nearly one-half. Therefore we are facing in the history of medicine a trouble-

some time—a time in which organization of medical men must become more cohesive than it has ever been before; a time that demands we weigh the facts and become more logical in our actions.

It is true we have our spiritual reward, in that we are fulfilling our mission as a great humanitarian organization in relieving distressed humanity, but there is a limit to such altruism. There must be some adequate financial reward—probably by larger fees for our services, which the public ought to pay promptly and cheerfully.

There should be compensation for much of our hospital work. It is reported that the throat specialists of one great city, in this most prosperous of all periods of history, are called upon to perform most of their tonsilectomies free of any charge.

This custom prevails in many cities of our own state. This is unnecessary and should be remedied. All “compensation” cases should pay the hospital doctor or surgeon who treats them, and the imposition of requiring us to treat any hospital patients free, who are able to pay their board, should cease. United action on our part, and between hospitals, is necessary to accomplish financial reforms along this line; otherwise these abuses will continue indefinitely.

All this, I maintain, should be brought to the attention of the public, who, owing largely to our own reticence, have been taking these things too much “for granted,” without any consideration of their cost to the medical profession.

If we are to “carry on,” someone must pay!

Second—Through the press.

Medical articles in the press should be clear and as untechnical as possible,

dealing, for the most part, in generalities, and avoiding any attempt to prescribe.

They should be sponsored by the county society and perhaps display the “Caduceus.”

Authoritative articles of this nature would tend to alienate the people from the cults and the quacks, and displace much of the well-intended, but garbled, writings of the lay-author.

Some allusion to catch the attention of the reader would be useful. The following article from the A. M. A. *January Bulletin* is a good example of what I mean.

“A CADMEAN VICTORY”

“Cadmus was sent in search of his sister Europa. His search was vain. It resulted, however, in the founding of Thebes. Here he killed a dragon and sowed his teeth, from which armed men sprang. These fought together till only five sturdy survivors remained. They took service with Cadmus and gave to Thebes a sound and sturdy stock. Ever since, a ‘Cadmean victory’ has come to mean a gain secured at great cost.

The conquest of diphtheria is a Cadmean victory. The horrors of this disease in a past generation are still remembered. The toll of death numbered at least one out of every two or three attacked. Death occurred in a most frightful form, viz., by slow suffocation.

The germ of diphtheria was first seen and described under the microscope by Drs. Klebs and Loeffler, in 1883. It was a far cry from this date to the discovery of diphtheria antitoxin by Von Behring, in 1890. This remedy has proved a veritable godsend. It has taken the horror completely out of the disease.

The mortality of diphtheria with antitoxin has dropped from between fifty to seventy-five per cent. to nearly one per cent. It falls even below one per cent. if the antitoxin is administered as early as the first day. The membrane then seems literally to melt away and disappear. The antitoxin is one of the few specific remedies in medicine, *i. e.*, it exerts a selective and destructive action on the toxin elaborated by the germ of diphtheria.

Of course the study of the disease not only has facilitated its cure but has lessened its prevalence. This has been brought about by rigid isolation of the sick, and routine examination of our healthy school children. Diphtheria in the future should be only a memory."

Third—This brings me to the function of the county society in this propaganda. One of its avowed purposes is the education of the public in matters pertaining to our profession.

Some years ago it was considered unwise to teach the laity anything about our professional business, but it soon became evident that, in order to make any progress in the control of disease, we must have not only their co-operation, but intelligent co-operation, which they could not give without some knowledge of the subjects in which their aid was sought. Part of our yearly meetings should, therefore, be open to the public, when matters of public health in all their phases should be discussed.

Here let me digress, for a moment, to call your attention to a very important matter, *i. e.*, to the necessity of a more active interest in our Association JOURNAL. I urge the county secretaries to report promptly to the JOURNAL all their county meetings, so that all of us may be in touch with, and inspired by,

the continual medical activities of our state.

In this connection I want to urge the formation of a woman's auxiliary society in each county. Such an organization adds to the pleasure of our meetings, increases our enthusiasm, and can aid us much in our relation to the public.

The Association should sponsor all lectures and writings for the people, in order that they may be free from error and endowed with authority, and should have supervision of all medical activities in our State.

All this leads me to advocate a full-time lay Secretary for our Association, who could organize these activities and assume many functions now carried on by different individuals. This would necessitate an increase in our annual dues—probably as much as ten dollars, but no expenditure could pay us better dividends. Let me mention some of the duties assumed by lay secretaries in other states.

A personal representative of the association during sessions of the legislature, acting as a watchdog and censor over undesirable proposals of taxation, etc., giving us someone to stress the medical viewpoint, making it a dominant factor in such legislation; sponsor all medical publicity, writing, lectures; who could provide speakers on short notice, on any subject, for any society; act as executive in arranging conventions and commercial exhibits; be able to help any member of the association in any way, from finding a location to finding a wife; a mediator to co-operate in workmen's compensation cases with manufacturers' and trades unions; someone in constant contact with departments in any way concerned with

application of medical laws; give constant service to state council, standing and special committees; keep a card index of every physician in the state, and a record of all medical defense cases; take care of all administrative details, working under the control of the council; make personal visits to our county societies, rendering them any needed assistance; do the detail work of the treasurer's office. In fact, the lay secretary's office would be a clearing house for all matters pertaining to our Association. He would also be editor of our JOURNAL, or of the Maine Department of the *New England Journal*. Moreover, the increase in our dues, besides giving us the official journal, and our membership in the county and state association, might make it possible for us to obtain cheap insurance for our professional liability, health, and that of the ever ubiquitous automobile.

And now let us consider some of the problems the Workmen's Compensation Act has thrust upon us. They are many-sided and perplexing, as attested by their various interpretations by physicians, societies, and the different states. The average physician has been too apathetic to the fundamental character of industrial legislation; but when we consider that the reported industrial accidents in 1927 were more than six times as many as the military casualties in our late war, we realize the importance of the subject.

To serve the best interests of his patients, a physician must be familiar with the compensation laws. How shall we interpret such phrases as "temporary" and "permanent disability"? "Partial" and "total disability"? Where rests our responsibility between the patient who calls us and the company that

pays the bill? What is a reasonable fee for services rendered in different kinds of cases?

Then there is the always perplexing question, of what relation do some remote symptoms bear to the original injury. The answers to these professional questions are susceptible of great variance. They cannot be settled by inflexible rules, nor Delphic oracle. We need some available referee to help us towards more universal agreement in these cases. This would be an important function of a lay secretary.

Then the very important question, has an insurance company legal right to refuse to pay the compensation fee unless the patient employs the company's special doctor? The industrial accident commission evaded the question when I asked for a ruling, and section 10 of the Workmen's Compensation Act simply says, "In case of emergency or for other justifiable cause the employee shall have the right to select a physician other than the one provided by the employer . . .," but this is largely emasculated by the fact that the commission is to be the judge whether or not justifiable emergency exists.

This question is interpreted differently in different localities, has caused much trouble to the parties concerned, and, what is more deplorable, has engendered much animosity between brother physicians. It tends to the establishment of "Contract medical practice," which always has been, and still should be, frowned upon. This is a momentous question in our own state.

We need some local board or person to help adjust these questions. A lay secretary could in time qualify to act as such a mediator. He would need some legal knowledge and executive ability,

and would command a salary of from four to six thousand dollars. If he filled the position, he would earn his salary.

What ought to be our attitude toward regulating medical practice? Shall we favor class legislation—one law for our own school, and different laws for other schools? Shall we favor a compromise, composite board of examiners? Shall we suspend our efforts against the unreasonable claims of the cults? Your President wishes to go on record as opposed to any compromise, to any compounding with what he believes to be less than the best, to any attitude that can be interpreted as a recognition of any member of the cults as practitioners of medicine. He believes in one standard examination, without favor, for all who would practice the healing art. The method is of little consequence. The qualification is all important. We are opposed to granting to irregular practitioners a license equal to our own, until they attain our standard of preparedness. Our opposition to unregulated medical practice comes from a desire to protect the public, and to

maintain a standard of medicine in our state comparable to that in any other part of the world. Our motives have been misunderstood, and our efforts flouted. We would leave the people perfect freedom in their choice of a doctor, but would like to see a correct label on what they buy. It is a question if the time has not come to leave this matter, *with its responsibility*, to the legislature—to protect the public with the standard we have raised, or break down that standard and trust to Providence.

And now, in closing, may I declare that the future of the Maine Medical Association is assured. Its members are more friendly, united, and active than ever before in the seventy-five years of the organization's existence. I speak for an ever increasing co-operation among its members. I urge a friendship, not formal only, but of the spirit, that will help us to condone each others' faults, and extol each others' virtues. Brethren, let us press on for another seventy-five years with patience, courage, and zeal to fulfill our mission—the emancipation of our fellow beings from the ills of mortal flesh.

PROCEEDINGS AT THE BANQUET OF THE MAINE MEDICAL ASSOCIATION

HELD AT THE BELGRADE LAKES HOTEL, TUESDAY EVENING,
JUNE 19, 1928, AT 7.00 P. M.

President Twitchell: Members of the Association, Guests and Ladies—especially the Ladies: I am a ladies' man by nature and by training, particularly by training. [Laughter.] I am happily surprised to see so many at this gathering, because this locality is somewhat

out of the way from railroad communication. I can imagine some of our delegates from out of the state asking "Where is Belgrade?" and somebody replying, "Why, near Waterville." "Waterville! Who ever heard of Waterville!" Well, some of us who know

the fellows who live down there wonder why there is so much stress on the "Water." [Laughter.] One might have said that it was near Augusta. I said I am happily surprised. I think it speaks well for the activity and the enthusiasm of our Association in this state that so many have gathered here in this somewhat out-of-the-way place. I have said that I am surprised. I should like to use just the right word. You remember that Mr. Webster always used the right word in the right place. A story is related of him that one evening he was sitting in his library awaiting the announcement of dinner with a rather attractive lady seated beside him. In one of those playful moods which rarely come to the legal profession, but are well-nigh universal in the medical profession, he put his arm around the girl and kissed her. Well, just at that moment Mrs. Webster appeared in the doorway. "Why, Mr. Webster, I am surprised." "No, madam, you are not surprised; you are astonished. I am the one who is surprised." [Laughter.]

A good many years ago, in the pre-Volstead era, I was a medical student at Bowdoin, and in the Senior Class was a gentleman whom I looked up to with admiration. A good deal of water has run under the bridge since that time. That was something over forty years ago. I am still looking at that gentleman with admiration and with affection. He needs no introduction to this audience. He comes from Bangor, but he belongs to Maine. He is the orator of the evening, and he will speak to you on this seventy-fifth anniversary of our Association on the history of the Association. It gives me great pleasure to introduce Dr. D. A. Robinson, of Bangor. [Applause, the audience rising.]

Dr. Robinson: Mr. President: In looking up the history of the Maine Medical Association, I saw a reference to some previous Maine Medical Association or Society. I could find no history of it, but today, at lunch, Dr. Cook, of York, said that he had with him a paper that had been given before that society, and he very kindly brought it down and loaned it to me for this evening. It says: "Address delivered at Brunswick before the Medical Society of Maine in their annual meeting September 4th, 1827," and it is by Benjamin B. Bartlett, M. D. As the Secretary of that meeting was the first Secretary of the Maine Medical Association, it seems to me that we can well claim that the Medical Society in Maine dates back one hundred years. I want to read what the Secretary wrote to Dr. Bartlett as a hint as to what the Medical Society thought of the doctor's address at that time. It is as follows:

"At the annual meeting of the Medical Society of Maine, holden at Bowdoin College on the 4th of September last, it was voted that the thanks of the society be presented to Dr. Benjamin B. Bartlett for his appropriate and excellent address pronounced this day in the meeting-house, and that the Corresponding Secretary make the request for a copy for the press." I merely throw that out as a hint as to what they did one hundred years ago to their speakers. [Laughter.] His opening address seems to me very appropriate to the present occasion—just his introduction. "Gentlemen of the Medical Society of Maine: I am aware that many members of this body might have been found far better qualified than myself for the important task of thus publicly addressing you. Yet impressed with the conviction that it is the duty

of every man to contribute all in his power, however feeble his ability, to the promotion of a good cause, I request your indulgence while I attempt compliance with your repeated invitation."

I feel just that way myself. This address took very high ground for the medical profession. It is a very readable, very eloquent address. After praising the society and telling what the members of it ought to be and what the society ought to do, then he pays his respects to the irregulars, the quacks and the charletans and what they were trying to do. Dr. Burney, in reading this over, said he found some things in it just in line with what we were saying this afternoon in the meeting. The speaker also dropped into Latin, and here is a quotation:

"Duram; sed levius fit patientia,
Quid quid corrigere est nefas."

"Tis hard; but patients must endure,
And soothe the wounds it cannot cure."

I call attention to this to show that there was a Medical Society before the Maine Medical, and so there is almost a continuous Maine Society since 1825. It is a pity, if their doctors were all like this, that their writings have not been preserved.

* HISTORICAL SKETCH OF THE MAINE MEDICAL ASSOCIATION

By D. A. ROBINSON, M. D., Bangor, Me.

When we study the history of our country during the Revolutionary times, and consider the character and ability of the men who issued the Declaration of Independence and who formulated the Constitution of the United States and launched the government founded upon it among the nations of the world, we are led to exclaim, "There were

giants in those days!" In like manner, when we read the story of the beginning of the Maine Medical Association, and learn the names and character of the men who were the pioneers in the founding of this Association, we are forced to the conclusion that they were men of no ordinary ability, but were men of mark in the state, men of foresight, devoted to the welfare of the great medical profession, and desirous of promoting its interests in any way that they were able.

Many of these men were not only eminent in the medical profession, but were active and influential members of the community where they resided. Two of them served as governors of the State of Maine. One of these, John Hubbard, signed the first prohibition law passed by the legislature of Maine, which was the first prohibition law adopted by any state of the union. The other, Alonzo Garcelon, was for many years one of the leaders in shaping the policy of the American Medical Association. Others held various offices of trust and influence in the state as members of the legislature, mayors of cities, etc. Beside Hubbard and Garcelon, there were James McKeen, of Topsham, Isaac and John Lincoln, of Brunswick, H. H. Hill and Geo. E. Brickett, of Augusta, A. J. Fuller, of Bath, S. H. Tewksberry, I. T. Dana and John T. Gilman, of Portland, Hosea Rich, Daniel McNer and Charles Snell, of Bangor, N. R. Boutelle, of Waterville, John Benson, of Newport, Samuel Johnson, of Belfast, John B. Benjamin, of Carmel, Charles Abbott, of Winterport, Charles E. Swan, of Calais, Sylvester Oakes, Alexander Burbank, of Lewiston, etc.

* Oration at annual banquet of Maine Medical Association, Belgrade Lakes, June 19, 1928.

The first annual meeting was held in Augusta, June 1, 1853. The first meetings were devoted to business, the adoption of constitution and by-laws, to obtain an act of incorporation from the legislature, to adopt a code of medical ethics. In the constitution that was adopted, the object of the Association was declared to be "mutual professional improvement, cultivation of friendly intercourse between its members, faithful support of regular and honorable practice, and prompt exposure at all times of the impositions of charlatanry and empiricism." Section 7 of this constitution was as follows: "Any member of this association who shall abandon the legitimate domain of medicine for the practice of homeopathy, hydropathy, or any kindred delusion, or on any consideration shall adopt principles of practice repugnant to true medical science, shall be regarded as destitute of professional honesty, totally unworthy of public confidence, and no longer entitled to membership in this association." I make these quotations to show to the younger members of the association the change that seventy-five years have wrought in the sentiments of the members of the regular profession of medicine toward these matters, for at the present time, as you all are aware, homeopaths are members in good standing in county, state and national medical associations and have representation on the Board of Medical Registration, and members of the regular school of medicine can confine their practice entirely to hydrotherapy, heliotherapy, physiotherapy, electrotherapy, etc., without losing their standing in the profession or in this association. One explanation for the stand taken by the members of the regular school of medicine against everything that savored of

irregularity in practice in those early days was the fact that at that time there were no laws to protect the public against charlatans and quacks, and so, like the vigilantes in the pioneer days in the west, they took the law into their own hands, and, like the aforesaid vigilantes, their words and actions were not always as agreeable as might be. In reading medical history, we find that for many centuries the practice of medicine was governed by the opinions and teachings of a few great men who had impressed their ideas upon the whole profession. Woe be to the doctor who dared to express opinions or practice methods of healing that were contrary to the teachings of Hippocrates, and Galen, and Paracelsus, and Pare, and Sydenham, and other great masters in the profession.

A colored minister was making his parish calls, and, as was his custom, he catechized such of the young people as he chanced to find at home, upon their beliefs. To one young man he said, "Rastus, does you beliebe that a whale swallowed Jonah?" "Yes, sah, I does." "Why does you beliebe a whale swallowed Jonah?" "Canse I'd be swatted if I didn't." Vesalins was "swatted" by his medical colleagues for his new method of teaching anatomy. Harvey was under suspicion for his new theories about the circulation of the blood. Jenner was ostracized for teaching that vaccination would prevent smallpox, and his practice would have been ruined if it had not been that an epidemic of that disease occurred in London and members of the royal family sent to Dr. Jenner to vaccinate them; then he became at once a popular hero. Lister was put under the ban by his contemporaries in the profession for teaching new ideas in regard to the

treatment of surgical wounds. During the last one hundred years the sentiments of the members of the medical profession have been gradually changing, so that now a physician may adopt any method of treatment that appeals to him, no matter how much it may differ from what the most of his colleagues are using, or even from what may be taught in the textbooks. It sometimes seems that the pendulum has swung so far in the opposite direction that there is a tendency to think the newest things are the best, merely because they are new. But under this "new freedom" of thought and action more progress has been made in medicine and surgery than in all the centuries that have gone before. This great advance in medicine and surgery coincides very closely with the time in which the Maine Medical Association has been in existence, so that the history of this Association for the last seventy-five years would be the history of medical progress during that time.

CODE OF MEDICAL ETHICS.

After this association had been properly organized by the adoption of a constitution and by-laws, and had been legally incorporated by the state legislature, it then proceeded to adopt a "Code of Medical Ethics" for the government of the members of the Association in their relations with their patients, their colleagues, the public, and, in general, to regulate their behavior as members of a noble and honorable profession. On first thought, it might seem that men and women who had devoted years of study in preparing themselves for one of the "learned" professions, and had been pronounced worthy of membership in it after careful examination by those competent to decide in such cases, might

be trusted to govern themselves according to the best ethics of the profession without the necessity of having a formal code for their guidance. But the experience of the ages has proven the contrary. Even the church, that for so many centuries has been the moral and spiritual guide of countless millions of people, learned the lesson years ago that there were those who would "steal the livery of heaven to serve the devil in"—"Wolves in sheep's clothing," as Scripture expresses it. Therefore the church found itself compelled to adopt a code or creed by which the actions of its members might be judged and the unworthy excluded. The legal profession, whose members are supposed to pass their lives in the endeavor to secure justice for their fellow men, found it necessary to establish a code of legal ethics in order to keep the unworthy outside the bar. Hippocrates, rightly called "The Father of Medicine," for his master mind dominated the practice of medicine for a thousand years, compelled all his pupils to subscribe to the Hippocratis oath, the first code of medical ethics, before they could be allowed to practice the art. The code of ethics adopted by the Maine Medical Association was the same as that adopted by the American Medical Association, which was a modification of the code written by Dr. Percival, of Manchester, England, in 1792, for the government of the medical profession of England.

The changes wrought by time during the seventy-five years since this Association came into existence have modified the code of ethics by simplifying it and making it keep pace with the progress of the time. The teachings of the code of ethics are of a high moral character, as is befitting the noble profession for whose guidance it was written. It

says: "A physician should not only be ever ready to obey the calls of the sick, but his mind ought also to be imbued with the greatness of his mission and the responsibility he habitually incurs in its discharge. They should, therefore, minister to the sick with due impressions of the importance of their office, reflecting that the ease, the health and the lives of those committed to their charge depend upon their skill, attention and fidelity." The obligation of secrecy extends beyond the period of professional services. None of the privacies of personal and domestic life should ever be divulged by the physician, except when he is imperatively required to do so. Every individual, on entering the profession, as he becomes thereby entitled to all its privileges and immunities, incurs an obligation to exert his best abilities to maintain its dignity and honor, to exalt its standing, and to extend the bounds of its usefulness.

Not many years ago a doctor applied for membership in the Maine Medical Association, but objections were made to him by some of his colleagues on account of unethical practices. Upon being asked by the Board of Censors if he did not know that such conduct was contrary to the teachings of the code of ethics, he replied that he did not, as he had never seen the code of ethics and did not know what its teachings were. When I was in the medical school the only allusion to the code of ethics was a talk of perhaps half an hour once each year by one of the professors in the school, but after Dr. Gerrish retired from the chair of surgery in the medical school he gave to each graduating class a regular course of lectures upon medical ethics, and the course was continued

as long as the school lasted. In 1912 the American Medical Association issued a little book of about twenty pages on "The Principles of Medical Ethics," and presented a copy to the members of the graduating class in all the regular medical schools of the country. As this is done every year, there is now no excuse for ignorance of the requirements of medical ethics, on the part of the younger members of the profession at least. I have spoken at some length upon this subject of medical ethics because, either through ignorance of its teachings or indifference to the feelings of others, it has been such a prolific source of trouble in the profession.

As I have said, the first meetings of this Association were mainly devoted to business connected with perfecting the organization. After about the tenth meeting the time of the meetings has been employed in reading and discussing papers of interest to the medical profession. As the wonderful progress in medicine and surgery that has been made since the middle of the last century coincides very closely with the time the Maine Medical Association has been in existence, as I remarked above, a perusal of the papers presented at its yearly meetings will give a very good idea of medical progress during that time.

THE MAINE MEDICAL SCHOOL.

As this Association naturally took an interest in everything promoting medical knowledge, it early became interested in the Maine Medical School and each year appointed visitors to the school from the Association, and so kept in close touch with its work and co-operated with the faculty of the school in many helpful ways. The school be-

gan in 1820, the same year that Maine became a state. It continued for one hundred years. During that time it had a high reputation among the medical schools of the country for thorough, up-to-date instruction, and it graduated many men who became known for skill and ability among the profession throughout the country. But in spite of its successful career for a full century, it is now as dead as Julius Caesar, and, like that famous hero, was slain by the hands of its friends. It seems to me that it is not greatly to the credit of this great State of Maine that while it can find millions of dollars each year to expend for good roads and other good and necessary things, it cannot find a few thousand dollars each year to aid in the support of a medical school, but compels her young men and women who desire to study medicine to go to some state where more liberal views prevail. I have a notion that the time is not far distant when our rural communities will no longer endure in silence their present condition of being unable to procure adequate medical attention for their families in time of need, but will rise in their might and demand of the legislators that they make early provision for supplying this deficiency.

THE ANATOMICAL BILL.

For many years there existed in Maine this anomalous condition, that whereas a doctor must have a competent knowledge of anatomy before he would be allowed to practice medicine, yet if he attempted to obtain such knowledge in the only way by which it could be obtained, namely, by dissection of the human body, he was made a criminal before the law. At the second meeting of the newly formed Maine Medical Asso-

ciation a committee was appointed to draw up and present to the legislature a petition that a law be passed facilitating the means of dissection. This committee was unsuccessful, and the fight was carried on year after year, but it was not until 1896, a period of more than forty years, that a satisfactory law was obtained. The same prejudice that existed for so many years among the laity against dissection still exists against post-mortem examinations, autopsies. It is to be hoped that every member of this Association will use his or her influence on all proper occasions to overcome this aversion to such examinations, they are such a valuable means of gaining medical knowledge.

PREVENTIVE MEDICINE.

For centuries the best men in the medical profession were devoting their energies to the work of discovering ways and means for curing the various diseases to which the human flesh is heir. In later times, more especially during the last one hundred years, leading minds in the profession have been studying to discover ways and means for the prevention of disease. If the old adage be true that "An ounce of prevention is worth a pound of cure," then the new way is better than the old in the proportion of sixteen to one apothecaries' weight. But, as can readily be seen by the results in smallpox, cholera, typhoid fever, yellow fever, etc., the proportion is not as sixteen to one, but as thousands to one. In line with this modern idea of prevention this Association began agitation for the establishment of a

STATE BOARD OF HEALTH.

In 1876, a committee of the Maine Medical Association went before the legislature advocating the formation of

a State Board of Health. This did not meet with quite as strong prejudice against it as the anatomy law, and yet many of the rural members, seeing such a majority of the doctors favorable to it, thought they saw signs that there was a Senegambian concealed somewhere in cord wood and so opposed the bill. Other efforts were made in succeeding years, but it was not until 1885 that a bill was passed. The State Board of Health had a successful career doing pioneer work for a number of years. Finally, the present Department of Public Health, the Maine Public Health Association, was founded, which is doing such effective work that it has received much favorable comment for its progressive ideas from public health workers in many of the other states.

BOARD OF MEDICAL REGISTRATION.

The great need of a law to regulate the qualifications of practitioners in medicine and surgery had long been felt, but no definite action was taken until 1870, when a committee of this Association presented to the legislature a bill for the establishment of such a board, but no favorable action resulted. After several more attempts, in 1886, a bill was passed for the creation of such a board, was signed by the governor and recorded as a law of the state. Notice, however, was given to some of the leading politicians that in a certain district where a congressman was to come up for re-election, there were quite a large number of irregular practitioners of medicine who had votes and who declared they would defeat said congressman if the registration bill was allowed to become a law. Some of the powers that were in Washington at that time took alarm and came down to Maine,

advised the governor of the situation and exhorted him to veto the bill. This he proceeded to do, although in doing it a leaf had to be cut out of the book in which the laws when passed are recorded. At the next meeting of the Maine Medical Association an investigation was started to determine whether or not the registration bill had become a law. Meanwhile the governor had died, and later the Supreme Court decided that the governor had the right to change his mind and veto the bill, so the controversy was settled and the bill defeated. While the controversy over the bill was going on, I happened to meet the governor in question, and he frankly said to me, "If I had known at the time that a leaf must be removed from the book of records in order for me to veto the bill, I would not have done it." In 1895, the present registration bill was passed by the legislature.

INSURANCE, A MEDICAL DEFENSE ACT.

Doctor baiting, or suing physicians for malpractice, had become such a common source of public entertainment that this Association was compelled to take some action to abate the nuisance. A study of such cases made it evident that there was no malpractice suit instituted without a doctor behind it. In order to make the members of the medical profession of the state personally interested in preventing such suits, the Medical Defense Act was adopted by this Association June 28, 1920, and the endeavor was made to have all the members of the Association take this group insurance. A large majority have done so, and the result has been that since the adoption of this method of insurance, malpractice suits have materially decreased in this state. If all the physicians of the state

would give their influence to the plan, there would be a still further decrease in malpractice suits.

MEDICAL JOURNAL.

In 1857, a committee was appointed to make arrangements for the Association to publish a medical journal. After much investigation the subject was dropped for lack of interest on the part of the members, and because of the great expense involved in the undertaking. When the reorganization of the Association was brought about, issuing a journal was a part of the new plan. Since that time the *JOURNAL OF THE MAINE MEDICAL ASSOCIATION*, under the able management of Dr. Gilbert, has had a very successful career. Now I understand that when the *Boston Medical and Surgical Journal* is discontinued, as it will be within the year, it is proposed to unite all the state medical journals into a *New England Medical and Surgical Journal*. With all the talent there is in New England, it seems as if we might have a medical journal equal to any now published in the country. Of course there is another side to the question. Some members of this Association may prefer to drive their own Ford, going when and where they please, rather than take a seat in a fine limousine, in which they have little ownership and less to say about when it shall start and where it shall go.

REORGANIZATION.

For many years leaders of the American Medical Association had been convinced that the Association was getting into ruts and so was not doing the work it might do and should do, and needed reorganization. After much discussion and many failures, about twenty-five

years ago the present form of organization was adopted. One state association after another adopted the new form of organization, but on account of strenuous opposition on the part of some of the older members of this organization, it was not until 1908 that the Maine Medical Association adopted the new form of constitution and by-laws in conformity to that of the American Medical Association. Under this new form of government, the county medical association is the foundation upon which all other medical organizations, state and national, are erected. The county association is the gateway through which all must enter in order to gain admittance to the state and national associations, and to these county societies all dues are paid. The value to the medical profession of the county of such an organization, extending through the states and the counties of the states, cannot be overestimated; in such union there is great strength and wide influence. The benefit that comes to physicians from membership in these medical organizations must be apparent to all. The frequent meeting together in the county society, hearing the papers that are presented, having opportunity to take part in the discussions, sitting with your colleagues around the banquet board, tends to bring about a better acquaintance among the individual members, and to bring them together into stronger bonds of friendship and good will. As we look upon the record of the three-score and fifteen years during which the Maine Medical Association has been in existence and see its growth from less than one hundred members to its present membership of nearly one thousand, and consider what has been accomplished for the advancement of the med-

ical profession and for the welfare of the people of the state, let us all resolve to use our best endeavor that the future of this Association may make steady and rapid progress along the path laid out for it by its illustrious founders.

Let children hear the mighty deeds which
 God performed of old,
 Which in our younger years we saw and
 which our fathers told.
 Our lips shall teach them to our sons, and
 they again to theirs,
 Till generations yet unborn shall teach
 them to their heirs.
 Thus may learn in God alone their hope
 securely stands,
 That they may ne'er forget his words, but
 practice his commands.

[Prolonged applause.]

The Toastmaster: We are all grateful, I know, to Dr. Robinson for the time and labor he has expended in producing this remarkably interesting and very able history of our organization.

We have a number of distinguished visitors with us to-night, and I know that you would all like to hear from them. Our very able Secretary, Dr. Bryant, knows all of these men personally. Moreover, I want to take this opportunity to say that I suppose that Dr. Bryant is better known to the medical fraternity outside of the State of Maine than any other Maine doctor, so I am going to ask Dr. Bryant to act now as toastmaster. Dr. Bryant. [Applause.]

Dr. Bryant: We are very fortunate on this seventy-fifth anniversary to have meeting with us the newly-formed New England Medical Council. On that Council we have some very able men. There are twenty or twenty-five of them present here to-night. I wish we had time to invite them all to the head table and hear from each one of them, but the time is too short. So, without further comment or further introduction, I am going to present to you one from each

of the New England States; and I have the honor to present as the first one on the list Dr. J. J. Cobb, President of the New Hampshire Medical Association. [Applause.]

Dr. Cobb: Mr. Toastmaster, members of the Maine Medical Association, and Friends: As the newly-elected President of the New Hampshire Medical Society, it is my very pleasant duty to bring to the Maine Medical Association greetings from the New Hampshire Medical Society. It gives me a great deal of pleasure to again meet in a gathering of the Maine Medical Association. I have many very pleasant recollections of the Maine society. I have many professional friends throughout the State of Maine who are members of the Maine Medical Association. I have every reason to feel at home in a meeting of the Maine Medical Association. Perhaps I might tell you a little bit why. In the first place, I was born in the State of Maine and lived in this state until I began to practice medicine in New Hampshire. I was a graduate of the Bowdoin Medical School. I remember many members of my class, but I have only had the pleasure of meeting one member of my class for many years. The member of my class of 1881 who is present this evening is your distinguished orator of the evening, Dr. Robinson, of Bangor. [Applause.] It seems rather a long time since 1881, the time when we received our medical diplomas from the Maine Medical School. I said that I felt very much at home in the Maine Medical Association. I was a member of that Association from soon after the time I began to practice medicine in New Hampshire until I joined the New Hampshire Medical Society in 1897. So, you see,

in coming back to the Maine Medical Association, I am like the Prodigal Son returning to his old home.

There are some other reasons why I feel rather at home in the old State of Maine, not the least of which is the fact that the lady who sits at my left, my good wife for many years, was a State of Maine girl. [Applause.] So, you see, I have many reasons for feeling at home and having a strong affection for everything which interests the State of Maine; and while I am very happy to bring to you greetings from the New Hampshire Society, there is just one thing which I wish to say. At our last meeting, the New Hampshire Society, through its House of Delegates, voted to establish at Hanover a clinical course of medicine, to be holden sometime in September for a period of four days. It is the intention of the New Hampshire Society to inaugurate this clinical meeting, and it is the intention to have up-to-date teachers in the various medical schools come to Hanover to give the members of the profession the opportunity to sit together and review for a few days and gather up the new things which the modern teachers can give the young as well as the old practitioner of medicine. I have been requested to extend to members of the Maine Medical Association an urgent request to consider the matter, and we would be very happy indeed if some members of the Maine Medical Association should see fit to make arrangements and come to Hanover and stay with us four days sometime in September and listen to the instruction of the men who will come there as eminent teachers in all branches of the medical profession. I wish also to say to you that the expense is nominal. I am instructed to say that for the

period of four days the total expenses will be about twenty dollars, including board, tuition and all of the outlay necessary for the four-day period. We should be most happy to welcome members of the Maine Medical Association to join with us at that time, enjoy the pleasure of getting a little better acquainted, and brush up in things medical and surgical. I urge you to consider the matter, and, if you are interested, you can get information from the members of the committee. Dr. Fitch, of Claremont, is chairman of the committee, and the other members of it are Dr. Gould and Dr. Carleton, of Hanover. Those three medical men are the committee having this matter in charge; and I would suggest that, if you are interested, you make your arrangements through your Secretary, Dr. Bryant, with the committee at Hanover to join us in this clinical meeting. We would be most happy to welcome you with us. [Applause.]

The Toastmaster: I thank Dr. Cobb for his kind remarks and for his invitation. I think along in September would be a pretty good time to go over there, when the leaves are turning, and have a "sit down" with the New Hampshire Medical Society at Hanover. The next speaker on the program needs no introduction—Dr. John M. Burney, President of the Massachusetts Medical Association. [Applause.]

Dr. Burney: Mr. Toastmaster, Ladies and Gentlemen: It is a great privilege, as President of the oldest medical society in the United States, to bring greetings to the Maine Society on its seventy-fifth birthday, although Dr. Robinson has cast some doubt as to your exact age. It reminds me a bit of two friends of mine who met on the street. One

of them had a large bunch of roses in his hand, and his friend looked at him a minute and said, "Andy, why all the roses?" "Why," he said, "this is my wife's birthday." "I'm glad of that. How old is she?" "Well, this is the tenth anniversary of her thirtieth birthday." [Laughter.] We of Massachusetts, of course, are very much interested with the things that go on in your state, because, if you will recall your history a bit, you will remember that Maine was at one time a part of the Massachusetts Bay Colony; so we have a real feeling of pride in your achievements, and whenever you do something which is particularly good, we get very proud in a maternal way and hope that there is something in heredity. [Laughter.]

Some of us do feel that a great deal can be accomplished in New England. We hear a lot about things in the Middle West, about tri-state meetings and all sorts of meetings. Now we are trying to put over something of the same sort, only a little better and a little more improved, in New England. We have problems in common. We have been talking with some of your members today about your problems in the legislature. They are exactly the same that we have been through in Massachusetts, and probably will have to go through again. The problems in New England are the same in all the states and it is proper that we should have some form of union. This meeting of the Medical Council is a step in that direction. Some of us also believe that the formation of the *New England Journal of Medicine* is a step in the right direction. If all of the New England States come into this *Journal*, we will become familiar with medical activities in the va-

rious states and will necessarily be in closer touch. I thank you for this opportunity to speak to you. [Applause.]

The Toastmaster: I will now call on the member of the New England Council from Rhode Island, Dr. Richards, of Providence. [Applause.]

Dr. Richards: Mr. Toastmaster, Ladies and Gentlemen: For one who was born in one of the three northern states of New England, it is not, I assure you, necessary to say that it is a great pleasure for me to come to the State of Maine. It is a particularly pleasant thing to come to this particular part of the State of Maine during the month of June. I assure you that I have enjoyed this visit very, very much.

The thing that is interesting us particularly at the present time is that the State Board of Health is just about to move into large quarters. For twenty-eight years we have been doing all the work we could in quarters somewhat cramped. In a few days we shall be moving into quarters that are ample, and our laboratory facilities we think will be particularly good. Our laboratory service is devoted very largely to the physician, to the surgeon and to the medical examiners of the state. We try to do a few things something like you do in Maine, and after waiting three, four or five years to see how you got along with examining automobile camps, we are just beginning to undertake some supervision over the camps. I am trying to find out, and have been asked a good many times, what a camp is. I talked a few days ago with your Health Commissioner, and he is going to try to help me out on just what a camp is. It is something of a serious problem.

I did not visit the annual meeting of

the Rhode Island Medical Association. I was away at the time. I am not a delegate from the Rhode Island Medical Society, but I am going to constitute myself a representative, and I feel certain that it will be pleasing to the Rhode Island Medical Society for me to express to you, Mr. Chairman, and to all the fellows here, the hearty good will of the Rhode Island Society. The Society there has the greatest respect for this Association and for all its members. [Applause.]

The Toastmaster: Next on my list is Vermont, and I am asking Dr. Edwin A. Hyatt, of St. Albans, to represent that State. [Applause.]

Dr. Hyatt: Ladies and Gentlemen: Late this afternoon, Dr. Bryant, in his usual gracious manner, asked me to sit at the speakers' table. I thanked him for the honor, but told him that I was not prepared to make a speech. The Doctor, as usual, rose to the occasion and said: "I don't want you to make a speech. I don't expect you to say anything." I will not do as public speakers often do when they have nothing to say—I am not even going to talk. I simply bring to you the best wishes from your sister State of Vermont, a commonwealth proud of her green hills and valleys, proud of her men and women, and I am sure that this Commonwealth is proud of her lakes and mountains and proud of her men and women. [Applause.]

The Toastmaster: I ask Dr. George Blumer, of New Haven, Professor of Clinical Medicine at Yale, to represent Connecticut. I am sure that he will have something to say to us that is worth while. [Applause.]

Dr. Blumer: Mr. Toastmaster, Ladies and Gentlemen: First of all, I want to

say what a great pleasure it is to me to bring the greetings of the Connecticut Medical Society to you on your seventy-fifth anniversary; and without any desire to run any opposition to New Hampshire, I would like to say that during the month of September we have what we call a Clinical Congress, which lasts for three days and which is addressed by men from all over the country. We bar our own members from appearing at that Congress. We would be very glad to see any of you there. This Congress began about three years ago and this is its fourth year. The first year I think we had no visitors at all from other states, but the number has been gradually growing. I think those who have come to New Haven from other states and have attended the Congress have gone away with a feeling that it has been well worth while. The fee for attendance, like that of New Hampshire, is a small one. The actual fee for attendance is only five dollars, but we do not provide board and lodging for that. However, we do put up the members of the Congress in college dormitories at a very low figure, and we provide parking for automobiles and take care of the feeding at a low price, so that I doubt whether it would cost very much more than twenty-five dollars.

Of course you all ought to know why the lions didn't eat Daniel. The keeper was a friend of Daniel's, and just before Daniel was put into the den the keeper went around and whispered to each lion that he was expected to make an after-dinner speech. I feel very much that way about after-dinner speeches. Probably many of you in Maine feel that we owe a great deal to Volstead. I think one thing we owe to

him is that it is much more difficult to make after-dinner speeches now than it was in the pre-Volstead days. There may be a scientific explanation of that. Of course you are interested in scientific explanations, and I happened to read a few days ago in a scientific journal a very short but appropriate paragraph which I will pass along to you in closing. I would like to say that I am not responsible for the heading of this article, and that I do not wish in any way to reflect upon the hospitality of Maine. The article is entitled "Low Humidity and High Taciturnity," and is as follows:

"Arizona is perhaps best known in the demi-lands of letters as the abode of strong, silent men. So steeped in sentimentality is the lore of their laconism that a pragmatic interpretation has become imperative.

"The low humidity of Arizona is almost as proverbial as the silence of her strong men. This is no mere fortuitousness. For low humidity begets parched throats, and it is axiomatic that a dessicated larynx and a vociferous tongue are incompatible.

"A practical application suggests itself. Repression of verbosity has been, at times, a problem of national concern, actually jeopardizing the Senate rules. The atmosphere of the district is notoriously humid, and in such an environment loquacity thrives. But to euthenics there is available an effective antidote, a local anesthetic of meannery selectivity. Even the most garrulous of filibusterers could be silenced quickly by the aid of a potent air-dehumidizer." [Laughter and applause.]

The Toastmaster: I wish we had time to call upon many more here of the Medical Council, but our time is brief,

and I wish to thank each and every one who has spoken here to-night. It makes a sort of feeling that New England all belongs to the same group, and that the only trouble is that we perhaps have drawn a little too far apart. I believe that this New England Medical Council and this *New England Journal* is going to unite the New England States into one big state where we can get together and swap stories—brag a little—and where anybody has done a good job in his own state, it may be discussed and passed along to the other states. Right here is an illustration of the help which is thus coming to us in this way. We are asking some of these men to stay over until to-morrow morning to help us in a problem which we have debated somewhat stormily to-day at at least two meetings of the Association. I have been asked by the President-Elect to announce a meeting of the House of Delegates—an adjourned meeting—to-morrow morning, in the usual place, and to invite all of those who are interested in the matter of legislation to come down there. I thank you. [Applause.]

President Twitchell: The hour is quite late and I will dismiss you with a short story. One time we were holding a medical meeting in Portland, and there was a very noted lecturer, a medical man, giving a lecture on diatetics at some place, and we thought it would be nice for him to address our meeting after he got through with his lecture. Our program was quite long, and he was brought in at about eleven o'clock and introduced and asked to make a speech. He said he thought it was too late to make a speech, but that it reminded him of his friend, Mr. Travers, of New York, who was not only a noted wit but

a stutterer. At one time Mr. Travers was visiting one of those hot springs in the midwest somewhere. The water from the spring had a very pronounced diuretic effect. One morning while he was strolling around, a very attractive young lady came up to him and said,

"Mr. Travers, what do you think I have done? I have just drank three glasses of this mineral water." "W-w-w-ell, "d-d-d-on't l-l-et me d-d-etain you." m-my dear young lady," he said, [Laughter.]

COUNTY NEWS AND NOTES

Piscataquis County Medical Society

The annual outing meeting of the Piscataquis County Medical Society was held July 12th at East Outlet, Mooshead Lake, Maine. Doctor Macomber, of Boston, addressed the meeting, and a dinner at Wilson's Camps, followed by a cruise on the lake, were features of the program.

York County Medical Society

The Summer Meeting was held at the Moulton House, Dunstan, Scarborough, Thursday, July 12. An excellent shore dinner was served at 1.30. This was the first summer outing with the ladies as guests that had been held since 1924. All present had an enjoyable time.

The absence of Dr. F. Y. Gilbert, Portland, President of the Maine Medical Association, was a disappointment, especially so because he was not able to attend by reason of illness.

Dr. E. W. Gehring, Portland, read a paper entitled, "A Great Scotsman and His Brother," referring to John Hunter and his older brother, William. Dr. Gehring's address was prepared with great care and accuracy and was a scholarly presentation of most interesting personalities. Several expressions of appreciation were made by the physicians present.

The presence of both Dr. J. A. Spalding and Dr. S. P. Warren, of Portland, eminent for fifty years in the medical profession of this state, was a delightful and noteworthy feature of the meeting. Dr. T. W. Luce, of Portsmouth, was welcomed as a visitor from our neighboring State of New Hampshire.

The report of the critical condition of Dr. H. Willis Hurd, of Biddeford, was received with many expressions of sorrow. Dr. Hurd underwent an operation for hepatic disease Thursday, July 12, at St. Barnabas Hospital. His death occurred Monday night, July 16, at the age of fifty-six.

The absence of Mrs. Frank Y. Gilbert, Portland, was regretted. It was planned to discuss the formation of a York County branch of The Woman's Auxiliary to the American Medical Association. Mrs. Gilbert is President of the State of Maine Auxiliary. Considerable interest was manifested in organizing an Auxiliary in York County.

Those following were present: Dr. and Mrs. B. F. Wentworth, Scarborough; Dr. and Mrs. H. F. Twitchell, Portland; Dr. and Mrs. W. E. Lightle, No. Berwick; Dr. and Mrs. C. W. Kinghorn, Kittery; Dr. and Mrs. F. W. Smith, York Village; Dr. and Mrs. W. H. Baker, West Buxton; Dr. and Mrs. C. F. Kendall, Augusta; Dr. and Mrs.

H. P. Hsley, Linnington; Dr. and Mrs. I. W. Stack, Ocean Park; Dr. and Mrs. D. E. Dolloff, Biddeford; Dr. E. W. Gehring, Portland; Dr. W. H. Kelly, Sanford; Dr. A. J. Stimpson, Kennebunk; Dr. T. W. Luce and Dr. Agnes

O'Donnell, Portsmouth, N. H.; Dr. J. A. Spalding and Dr. S. P. Warren, Portland; Dr. F. E. Small, Biddeford; Dr. G. R. Love, Saco; Dr. A. L. Jones, Old Orchard.

A. L. JONES, *Secretary*.

NOTICE

The Fourth Clinical Congress of the Connecticut State Medical Society will be held in New Haven, Sept. 18th, 19th and 20th, 1928. The Congress offers an intensive review of progress in medicine and surgery, with a program that includes twenty addresses and con-

ferences. In 1927 four hundred physicians from nine states attended. Information may be obtained from Dr. Creighton Barker, 129 Whitney Ave., New Haven, Conn., in regard to the program of the Congress.

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*ACUTE ENDOCARDITIS

By DR. J. O. PIPER, Waterville, Maine

Endocarditis is now generally conceded to be of an infectious nature, and due to a growth of pathogenic bacteria on the inner membrane of the heart. A great variety of diseases produce it, among which the chief is rheumatism, then scarlet fever, typhoid fever, pneumonia, and Babcock has said a very ordinary looking tonsillitis, and possibly tuberculosis.

The more severe forms are usually found to be due to a septicopyemic infection, such as purulent or puerperal infection, erysipelas, suppuration of the biliary passages, or genito-urinary organs, suppurating appendicitis, purulent pleurisy, etc.

The local lesion that serves as a portal of entry may be insignificant, as, for example, an infection from a splinter in the foot, or a simple tonsillitis.

Culture of the blood during life, and examination of the endocardial vegetations from the cadaver have revealed the presence of various bacteria, especially streptococci, pneumococci, gonococci, colon bacilli, more rarely tubercle bacilli.

The first experimental researches were made by Gilbert and Lion, who reproduced infectious endocarditis by injecting into the veins of an animal the bacteria taken from a subject suffering from this disease. Mannaberg and Bezancon later produced a mitral endocarditis by inoculating streptococci under the skin of a rabbit's ear.

Previous injury of the endocardium facilitates invasion by pathogenic bacteria, which probably explains why secondary endocarditis develops preferably in subjects already infected by an old valvular disease.

According to Klebs and Ortner, the bacteria are deposited directly on the surface of the endocardium. According to Koster, they are carried by the blood, in the minute vessels of the valves, to the neighborhood of their free border, and there form thromboses, which are the points of departure of the endocarditis. This latter explanation is the one generally accepted.

Any part of the endocardium may be attacked, but especially the valves, probably because of their great functional

*Paper read before the Annual Meeting of the Maine Medical Association.

activity. The bacteria seem to prefer well oxygenated blood, hence attack the right heart in the embryo, and the left heart after birth.

The severity of the endocarditis depends on two factors, first, the virulence of the infection, second, the state of debility of the subject. Pevener was able to produce at will, benign or infectious lesions of the heart, by modifying the resistance of the animal used for experimentation.

Acute endocarditis is usually described under three heads—first, rheumatic, second, acute ulcerative, third, subacute bacterial endocarditis.

The rheumatic is by far the most common form, and usually accompanies or follows an attack of acute articular or muscular rheumatism, chorea, tonsillitis, or scarlet fever. Some of our able clinicians are inclined to revise the nomenclature of acute rheumatic fever to carditis, especially in children, as most all children are apt to develop a heart lesion, and I believe I am correct in stating, that in about 75% of all cases of acute articular rheumatism, the heart becomes affected at some time during its course. This type of endocarditis has also been termed verrucous or benign type, as the tendency under proper management, is for the acute phase to subside, the heart remaining more or less damaged, or, in some cases, completely recovering.

The pathology of this type is very interesting. At the margin of the valve attacked, a small, wart-like nodule is formed, which may be sessile or pedunculated. This becomes infiltrated, and finally becomes a hard, firm, fibrous patch, if the heart is able to overcome the infection to this degree. In other cases, this nodule entirely disappears

before it gets fibrinous, and the valve gets well after a long time.

The symptoms of this type of endocarditis are not very marked. Perhaps, when the heart is first attacked, there is a slight acceleration of pulse rate, the appearance of a heart murmur, and a slight enlargement of the heart. If the heart lesion follows the pathology marked out for it above, the patient recovers from the acute part, to die from chronic heart disease several years later.

Of course there are very virulent cases of so-called benign endocarditis, so that it would seem impossible to distinguish from the second type, or ulcerative endocarditis.

Ulcerative or malignant endocarditis is usually a complication of, or a sequel to, the very severe infectious, such as septicemia, puerperal sepsis, pneumonia, gonorrhea, etc.

The pathology of this condition differs from the benign form, sometimes from the beginning, but more often in the later stages. In the very severe form, it is characterized by the formation of a small, pink plaque, having, in its center, a cup-like depression, which excavates, giving rise to an ulcer, and is necrotic from the beginning.

In the less severe cases, vegetations are formed, but are little vascularized. These are soft and friable, and organization does not take place. They ulcerate, the ulceration going into the endocardium itself, and may cause perforation; or the infected debris, with its bacteria, is swept into the general circulation, producing a primary infectious process in other parts of the body. This form is not confined to the valve leaflets, but may attack any part of the endocardium. By preference, the left side of the heart is attacked one hun-

dred seventy-one times out of two hundred cases, according to Osler's statistics.

The emboli from this type of endocarditis cause trouble in two different ways: First, the emboli being small, they land in the various organs, as the liver, lungs, spleen, and joints, and since these emboli are always infectious and contain bacteria, a secondary focus or an abscess is formed. Second, if the emboli are large, they obstruct the larger arteries of circulation, and being on the left side of the heart, most usually the arteries of the brain or the limbs, and in one case, reported by Osler, the whole abdominal aorta was obstructed by an embolus.

This form of endocarditis, although of such a severe nature as to cause death within a short time, often escapes detection, mainly because the original infection is so severe that all other symptoms are masked.

The symptoms that would make one suspicious of malignant endocarditis are, —a chill developing during the course of the severe infection, markedly accelerated pulse, and pain in the region of the heart, (although I believe the pain will more often be proven to be due to an accompanying pericarditis). There may or may not be a heart murmur, because the patient is very apt to die before the murmur has time to develop.

The palpitation of this form is much more pronounced, than in the benign endocarditis, the heart's action being very tumultuous and accompanied by oppression in the precordial region. There are two types of general symptoms in this disease, the typhoid and the pyemic. In the first, the temperature remains continuously high, the patient lapses into a typical typhoid state, low muttering or active delirium, dry tongue, lips covered with sordes, com-

plete loss of appetite, abdomen distended, and often a profuse diarrhœa. The lungs become involved in a purulent bronchitis, and the patient dies in a few days. In the pyemic form, the fever, as indicated by the name, is of an entirely different type, being up during part of the day, and down in another part, these rises of temperature being accompanied by chills. After a time, we get the characteristic symptoms of emboli being cast off into different parts of the body, when death is caused by shutting off vital organs, or by secondary infections in other parts of the body, or an abscess of the liver, spleen, etc.

The third type of endocarditis I wish to speak of, is subacute bacterial endocarditis, or, as some speak of it, Libman's disease, since this clinician has probably done more research work on this malady than any other man, although the disease was described by Jaccoud, of France, in 1882, and by Litten, of Germany, in 1881, also by Osler, in 1885.

This is the only disease, in which pathology offers an example of a septicemia, following the course of a chronic disease, and it is singular that the heart, usually so resistant to infection, should, of all the organs in the body, exhibit this phenomena. This form of endocarditis differs from the others in that, in the benign and malignant forms, the heart is a secondary focus of infection, while in the subacute form, the heart is the primary focus. The heart remains the source of infection, throughout the course of the malady, which may last for several months, and leads to death as inexorably as does the malignant form.

The pathology differs from the other forms of endocarditis, in that the heart attacked is, in about every case, already

a chronically diseased heart from, most often, an old rheumatic infection. There are sessile or pedunculated deposits on the old fibrous lesions. In one case that I saw, there were pedunculated deposits that were fully a centimeter in length, and these were located all about the chronically diseased mitral valve, these new masses being very soft and friable. Ordinarily it appears without any apparent cause, or it may follow some minor malady, as grippe, catarrhal infection, or a tonsillitis.

As I have tried to indicate, this form of endocarditis differs from the others, in that there is no complicating disease associated with it, but is a direct infection of the endocardium.

The symptoms are best illustrated by a case reported by Kaye and White: Man, 33 years old. History of rheumatic fever twenty-two years previous. Six weeks before admission to hospital, had an attack of influenza, with lassitude, chilliness, and anorexia; since this time, had felt weak and lost weight. Had quite a productive cough, with white colored sputum, negative for tubercle bacilli. Examination of the patient showed some pallor, enlargement of the liver but not the spleen, tachycardia fever, loud aortic diastolic murmur at base, with Austin Flint murmur at the mitral area. During stay in the hospital, patient continued to have a daily evening rise of temperature. Blood count showed the whites to be 18,000, and no anemia.

I think the fact of no anemia rather remarkable, as what cases I have seen are markedly anemic, and the skin is particularly white and waxy looking.

Any patient presenting an irregular type of temperature that is prolonged, should lead one to think of subacute bacterial endocarditis as a possible cause.

The diseases that are most difficult to differentiate from this disease, are typhoid fever and tuberculosis.

A point that is very helpful as a bedside procedure, in differentiating these diseases, is one mentioned by Levine. It is that in tuberculosis, the blood pressure is always low for the person's age, while in subacute bacterial endocarditis, a heart murmur can always be detected. There is, in a great many cases, a fine punctate hemorrhagic spot on the inner canthi of the conjunctiva, this occurring fairly early in the disease. The blood culture and widal will rule out typhoid fever.

Except for the heart murmur, there are hardly any symptoms, referable to the heart, the heart's action in most cases being perfectly regular. Libman, Sacks and Rothschild, in a study of cardiac arrhythmias in this disease, say, "Our observations make it clear that arrhythmia is not a part of the clinical picture of subacute bacterial endocarditis."

There are two other points very important to note, in diagnosing this disease, viz., first, emboli. Very frequently the spleen is enlarged and tender, due to emboli lodging in it, and later in the disease, there are fine petechial areas, which are small red or pinkish macules, occurring most frequently on inside of palms, fingers of hands, and sole and toes of feet. According to Huxthal, petechia occurred in 50% of a large series of cases from the Massachusetts General Hospital. Second, blood culture. This is one of the most important things to be done in determining subacute endocarditis, and it is to be remembered, that the negative blood culture on one occasion does not rule out the disease, but it should be repeated several times, if necessary.

According to J. Cowan, the blood culture is more apt to be positive in a febrile period, and is of value, not only in diagnosing the disease, but may be helpful in suggesting treatment.

The organism most usually found in culture, are of the streptococcus variety, the streptococcus veridans being more frequently found in a series studied by Martock and Muratowa, but this is still a mooted question.

The prognosis of an acute endocarditis varies, that of the benign form being fairly good as to the recovery from an acute stage, of malignant endocarditis, absolutely bad. Of subacute endocarditis, it used to be thought invariably bad, but there are some proved cases reported in recent literature that have recovered. Bogendoerfer reports three cases out of a series of twenty-nine from the Wurzburg clinic.

There is no specific treatment in any form of acute endocarditis. In the benign and malignant forms, treat the underlying disease. In the subacute forms, the treatment must be symptomatic, although chemotherapy and antisera have been tried, but with little success.

CONCLUSIONS

I. That benign and malignant endocarditis are examples of secondary foci of infection, while subacute-bacterial

endocarditis is an example of a primary focus of infection.

II. That the pathology of the three forms, as far as the endocardium is concerned, is virtually the same, only being altered by the virulence of the infection.

III. That the prognosis is fairly good as regards the benign variety, and practically hopeless as regards the other two.

IV. That there is no satisfactory specific treatment for any of them.

V. That it might help to do away with the names, benign and malignant endocarditis, and to name them after the etiological factor causing them.

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STUDY OF BREAST TUMORS

By EUGENE E. O'DONNELL, M. D. and MORTIMER WARREN, M. D.

Two hundred eighty-nine breasts, or portions thereof, have been submitted to one of us for histological examination during the years 1920 to 1927. This study is based upon a review of this material. We have discarded three cases, which showed no definite histological lesion; two which were examples of simple mastitis; one of hemangioma; two of Lipomata; one of hemorrhage into breast; one of Paget's disease of the nipple. We include in this series cases of chronic cystic mastitis. Of the remaining 280 cases, 126 were malignant and 154 non-malignant, a percentage of 45 and 55 respectively. Nine male breasts were represented.

Data obtainable in 48 cases of carcinoma showed an average duration of $8\frac{1}{2}$ months during which the patient had been aware of some trouble with the breast. The shortest interval was four days, the longest four years. In the latter instance there appeared to be a malignant development in a breast, the seat of a fibro adenoma.

The average age of 64 cases of carcinoma was 53.7 yrs.; extreme 29 to 70. The average age of 45 cases of adeno fibroma, 41.4 yrs.; extreme 21 to 80. The average age of 18 cases of chronic cystic mastitis, 45.4 yrs.; extreme 28 to 65.

Forty-eight encapsulated tumors were noted; these were chiefly intracanalicular fibromata. Twenty-two operative frozen sections were done, with an error in two; both were later considered to be early carcinoma. This illustrates the fact that the surgeon should not allow a negative frozen section diagnosis to change his procedure if he believes the

tumor is cancer; conversely, a positive frozen section diagnosis in the absence of definite gross signs of malignant disease should be regarded as sufficient to warrant radical measures. Facilities for preparing frozen sections are not always available, nor is this absolutely necessary, for in most cases the gross appearances are sufficient to guide the surgeon in his operative procedure. We, of course, assume his knowledge of the clinical data in each case. Not infrequently, however, exploratory incision does not reveal the condition anticipated from the pre-operative diagnosis; in this field lies the chief value of a frozen section.

We take it for granted the surgeon needs a history to guide him in arriving at a satisfactory knowledge of any morbid condition. We doubt if it is generally appreciated these same clinical data are invaluable for the pathologist, particularly in border-line cases. This is well expressed by Beattie & Dickson (¹). In speaking of differences between benign and malignant tumors they say, "These differences are only a matter of degree and in certain cases—it is sometimes very difficult or even impossible from the histological examination alone to determine whether a given tumor is or is not malignant. The microscopical and naked eye character, the rapidity of growth and age of patient must be carefully considered. The pathologist must have at his disposal all such relevant information." As brought out by Bloodgood², there is great difference in opinion in the histological interpretation of breast tumors which are not definitely carcinomata.

*Paper read before the Annual Meeting of the Maine Medical Association.

The outlook in this situation is more favorable than appears at first sight, in the fact that the prognosis is relatively good in these border-line conditions under consideration. Secondary operation, if advisable, is not as hopeless as it is in outspoken cancer³. The term precancer is applicable in this group of tumors which we have been discussing. It is largely due to the work of Ewing⁴ that this terminology has come into general use. Lesions which will be so classified vary with the personal equation of the observer.

Practically, we have three types of tumors to deal with in breast surgery, carcinomata, adeno fibromata and chronic cystic mastitis. We are not considering the occasional sarcomata nor are we including tuberculosis, neither of which appear in our material. These lesions can be further subdivided, and in individual cases it is of value to define the tumor in more accurate histological terms. In recent years there has been much interest in the prognostic significance of the various characteristics which the epithelial elements may manifest; in the extent of cell differentiation and thereby the arrangement of the cells; the degree of secretory activity as shown by vacuoli and droplets of mucoid material; uniformity or otherwise of the cells; and rapidity of growth as manifested by nuclear changes. These manifestations have been studied notably by Broders⁵ and Greenough⁶. At some later date we hope to review our cases from this point of view, for we believe valuable information is thus

obtained. In individual cases, however, the problem is direct so far as the patient is concerned; there is only one question, "Is the tumor malignant or otherwise?" The procedure cannot be varied to suit the grade of malignancy in the present state of our knowledge.

The primary object of this study is to present our point of view as pathologists in diseases of the breast, and to review for our fellow-members a few typical microscopic pictures of breast tumors. We believe it is important for us in this State to compile accurate statistical data on this subject, in order that we may know our own results and thus assist in the general effort to combat this disease, for it is only by the co-operation of all concerned that the ideally possible results can be obtained in this hopeful field of cancer surgery.*

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* Note: This paper accompanied a demonstration of lantern slides of micro-photographs of type examples of breast tumors. Our thanks are due to Harold Ayer, B.S., for the preparation of the slides.

*ORTHOPEDIC ASPECT OF LOW BACK PAIN

By EDWARD L. HERLIHY, M.D., Bangor.

Mr. President, Members of the Maine Medical Association, and Guests:

Pain in the lower back, generally diagnosed as rheumatism, sciatica, lumbago, and "drop stitch" in the back, is undoubtedly one of the commonest symptoms with which the general practitioner is confronted. I certainly did not realize the vast number of causes of low back pain until I began to tabulate them. I believe there is too much tendency on the part of the general practitioner to be impatient with persons with this symptom. Especially is this true with regard to women patients who, with insufficient examination, are condemned as neurotics, and given aspirin, and either adhesive tape strapping or belladonna plaster. Many women with backache are labeled as pelvic cases and operated on all too frequently. May I cite a few remarks in this respect given by P. H. Kreuscher, speaking before the Chicago Gynecological Society. He claims that very little relation exists between low back pain and pelvic infection, except in rare cases in which some of the sacral nerves are involved by a more or less generalized pelvic infection. Furthermore, he showed that there is little reason for the popular opinion among the laity that malposition of pelvic organs gives rise to much backache. He brought out in summary: First, that backache and deformity are due only in rare instances to disease of the pelvic organs; second, that careful examination will reveal other causes of pain, and will prevent the numerous unnecessary and often unsexing operations; third, that removal of the cause and proper support-

ing measures will often give complete relief; fourth, that backache in women, as well as in men, is the responsibility of the orthopedic surgeon and not the gynecological surgeon.

With genitourinary cases, such as prostatitis and seminal vesiculitis, pain in the back is frequently the most prominent symptom.

The Clinical Orthopedic Society Committee sent out a questionnaire to two hundred fifty American orthopedic surgeons, seventy-nine of whom answered. The first question was: "In your opinion, what are the causes of low back pain?" Many causes were given, such as arthritis, strains, posture, congenital abnormality, trauma, focal infections, pelvic, genitourinary, spondylolisthesis, under development, abdominal, flat foot, fracture, exposure, constipation, automobile driving, and luxations. Question two of this questionnaire was, "Which are the commonest?" They are rated in the following order of frequency: arthritis, posture, trauma, sprain, focal infection, sacroiliac, congenital abnormality, pelvic and flat foot. From the sum of the answers to these two questions, we may boil down the causes to arthritis, posture, and trauma. Most of the other causes we may bring under these three heads, such as, strain under trauma, sacroiliac under either trauma or posture, etc. This gives us a very simple classification.

A short anatomical consideration of the prominent joints of the lower spine, I believe, is called for. We will take up only the sacroiliac, the lumbo-sacral, and one representative lumbar joint. As we take one lumbar joint we must

*Paper read before the Annual Meeting of the Maine Medical Association.

consider the series of joints that go to make it up. First, at the junction between the bodies of the vertebræ there is a large pad of cartilage. An anterior common ligament and a posterior common ligament are the principal means of stabilization of this joint. The joints between the articular processes are gliding joints, with synovial cavities enclosed by capsular ligaments. Then we have the ligaments extending between the laminae of the adjacent vertebræ, the interspinous ligaments between the spinous processes, and the supraspinous ligament extending along the tips of the spines. Motion, owing to the thickness of the intervertebral disc, is very free in flexion, and moderately so in extension, due to the articular processes. There is a slight amount of rotation and lateral flexion allowed by the fact that the articular processes do not fit closely together.

The sacroiliac joint is composed of a roughened articular surface on the side of the sacrum and another roughened surface on the side of the ilium, both of which are cartilage clad. This joint, we now believe, has, in almost every instance, a synovial cavity. An anterior and posterior ligament is present, the posterior being much stronger than the anterior. There is also a strong interosseous ligament extending between the articular surfaces. The psoas muscle in front of the joint is a powerful brace, one writer going so far as to claim that motion at this joint was impossible without first abducting the thigh to relieve the tension of the psoas muscle.

J. E. Goldwaithe, in 1905, published the results of an extensive work based on five hundred hospital cases, together with extensive dissections. He proved that motion existed in this joint and

that the joint could be readily dislocated. The degree of motion was determined by driving a nail into the ilium near the articulation, and another into the promontory of the sacrum parallel to the first, then by raising the leg fifty degrees with the knee straight, the ends of the nails separated about three millimeters. Many research workers have since proved that Goldwaithe's conclusions were correct, without very much increasing our knowledge of the joint.

The lumbo-sacral joint, in its main part, inclines forward and downward about thirty degrees when a person is standing erect, and, except for the articular processes at the back, the whole spine would naturally slip forward on the sacrum. The ligaments under normal conditions represent considerable support, but they would naturally be stretched in a short time, and displacement take place except for the articular processes. The lumbo-sacral joint is capable of considerable motion. Fully one-half of the motion of the trunk below the dorsal region is accounted for by this articulation and the one just above it. In forward bending, motion of the lumbo-sacral joint is made chiefly by the articular processes of the fifth lumbar vertebra sliding forward on the opposing processes of the sacrum, together with some compression of the intervertebral disc. Therefore the stability of this joint depends upon the two articular processes and the ligamentous support. The principal ligaments are: First, the lumbo-sacral arising from the lower front part of the fifth transverse process, and being attached below to the lateral surface of the base of the sacrum; second, the ilio-lumbar ligament arising from the tip

of the fifth transverse process and inserting into the crest of the ilium. This condition exists on both sides of the joint, requiring four major and several minor ligaments, such as the anterior and the posterior, to support this joint. It must be further remembered that the lumbo-sacral cord, which is made up from the roots of the fourth and fifth lumbar nerves, supplying the sensation to the buttocks, anterior and posterior aspects of the thigh and the sciatic region, passes just under the transverse process of the fifth lumbar, and in intimate connection with the lumbo-sacral and the ilio-lumbar ligaments. Here we find an answer to pain extending down the leg. These nerve roots, finding points of exit through the intervertebral foramina of the lumbar spine, associated with these ligaments, and also extending across the lower margin of the sacroiliac joint, are here exposed to any abnormal condition that affects these parts. However, in the foramina, and where they are in relation to the ligaments, they are in an immovable bed, whereas in their relation to the sacroiliac joint they are in a movable bed. This would leave us to think that lumbo-sacral trouble would be more apt to give sciatic pain than sacroiliac. This, however, is not the case. The point I wish to bring out in these last few remarks is, that sciatica should always lead to an investigation of the condition of the lower spine.

DIAGNOSIS

X-ray is important at all times, but usually in a negative way rather than positive. Danforth claims positive findings in 80% of a short series of cases. Magnuson claims positive findings in only 3% of his cases. My ex-

perience has been that from 20% to 30% of the X-rays will help us in our diagnosis.

Two or three questions arise in my mind as leads, to get our bearings. First, what is the exact location of the pain? Second, in what direction is it referred? Third, how did it arise, after some unusual exertion or after some unintentional movement such as a quick twist? Fourth, how long has it lasted? Fifth, is it constant or intermittent? Sixth, what position will ease it? Seventh, what condition or action causes it to return?

By inspection we observe gross deformities, curvatures, tilting of the pelvis, etc. By palpation we examine for tenderness and fluctuation. The patient is then requested to go through the active motions of flexion, extension, side bending, and rotation, while we note the limitation of each motion.

In arthritics, the X-ray may be negative early in the disease; however, in the long standing cases we find the characteristic bone changes. Arthritis, by the way, is one of the oldest diseases of which we have any record. It is even found among the fossil remains of the dinosaurs. As to frequency we need only to find the following record. In the last year of the war, 60,000 cases developed in our American army. Many times trauma stirs up this condition, making an extremely resistant combination to treat. We find spasm of the lower back muscles, localized rigidity, and decreased mobility on active motion. With the patient in the ventral prone position, hyperextension of the spine causes spasm of the lumbar muscles. Pain may radiate down the front or back of the leg, according to which portion of the nerve group is in-

volved. Straight leg tests are generally negative. These cases seem to be worse when the bowels are constipated or any emotional strain is present.

In traumatic cases the X-ray may answer the question partially, that is, we may find a slight fracture in this region, but mind you, this is only the beginning, because with all fractures there is still the problem of the severely strained back. In other words, the slight fracture may be of small significance and the ligamentous and muscular injury may make our patient a full-time chronic.

One of the hardest problems with which I have to deal is to decide when a traumatic spine is cured, especially if the problem is complicated by the fact that the patient receives industrial accident compensation. The milder forms, such as "dropped stitch" in the back and "automobile back," are simple to diagnose; however, if they are not treated, they are just the class of patients that fall into the hands of practitioners of other schools of therapy. In the postural type of back pain, we must watch especially for the various abnormal curves, the tilted pelvis, inequality in the length of leg, flat feet, malalignment of old fractures.

In the fine points of our diagnosis, we have to differentiate between sacroiliac and lumbo-sacral conditions. For this I know of no better way than to cite a few remarks by Meyerding, as follows: "In sacroiliac conditions tenderness along the inferior sacroiliac ligament and at the sacrosciatic notch is found, while in lumbo-sacral, the tenderness is over the ilio-lumbar ligaments, and over the midline of the lower lumbar and sacral spine."

In the standing position with sacro-

iliac conditions, bending forward takes place at the lumbar region until pain is experienced, and the knee on the affected side is flexed, allowing the patient to bend still further. Bending backward is relatively free. In lumbo-sacral conditions, the lumbar region is rigid, and forward bending takes place at the hip joints, while in attempting a backward bend, the knees are flexed.

From the sitting position, forward bending is free in sacroiliac cases. In lumbo-sacral lesions, no difference is noted in the range of forward bending, in this position.

In the dorsal prone position, in cases of sacroiliac strain, pain is less upon flexion of the spine than in the standing position, while in lumbo-sacral conditions the spine cannot be flexed because of the pain.

In straight leg raising, pain before movement of the lumbar spine indicates a sacroiliac condition. However, pain after the lumbar spine has commenced to move may be due to either condition. The leg on the unaffected side, in sacroiliac cases, can be brought to a higher level without pain. In lumbo-sacral cases, pain comes on at the same level on both sides.

If there is pain upon compression of the crests, and over the pubis, it is in favor of a sacroiliac condition.

Pain in lumbo-sacral conditions may be referred along the fifth lumbar and the first sacral to the anterior aspect of the leg and dorsum of the foot.

Pain, when referred along the posterior aspect of the thigh, generally indicates a sacroiliac condition. In some sacroiliac cases, a click can be heard just before the limb reaches full extension, when being lowered from a flexed position. Adhesive strapping of the

pelvis is used as a test, and relief of symptoms indicates a sacroiliac condition.

My experience does not entirely agree with this adhesive strapping test, as I have found that strapping will relieve many conditions other than sacroiliac.

TREATMENT

First eliminate, as far as possible, all foci of infection. The usual routine of hunting out a focal infection should be gone through, although many times the horse is out of the barn, and a second focus has been set up elsewhere, that is impossible to get at. The teeth, tonsils, gall bladder, sinuses, seminal vesicles, and especially the bowels, should be investigated by question and examination. I am a firm believer in the idea that a sluggish bowel is a common source of focal infection. I do not care if the bowel is regular. It still may be sluggish. In other words, it may be a day or two behind schedule, allowing twenty-four or forty-eight hours extra absorption of toxins. Pemberton, in the army, found that seventy-four of his cases had demonstrable foci of infection, of which 52% were in the tonsils, and 33% dental in origin, and 12% genitourinary. In seven hundred cases in civil life the incidence of dental and tonsillar foci was reversed.

Within the last few years there has been considerable discussion about and evidence in favor of arthritics having a low carbohydrate tolerance. Therefore a low carbohydrate diet has been recommended. The day is gone when we should bar red meat from the diet of an arthritic, due to the fact that the elimination of red meat increases the anemia that these patients already have as a rule.

In regard to medicine, I believe the

keeping open of the bowels with salines, and the giving of aspirin or sodium salicylate in fair-sized doses is of value. Colonic lavage is also of value.

The first and simplest form of mechanical aid is to strap the back with adhesive tape. I have two methods of doing this:

(a) the straight strapping with adhesive tape three or four inches wide from in front of one anterior superior spine to a point in front of the other, going as low as possible on the back.

(b) straight combined with diagonal strapping, the diagonal straps crossing in the lower lumbar region.

Second, strapping plus rest in bed, with a small firm pillow under the lumbar spine.

Third, placing the patient in a plaster shell, a plaster jacket, or, if necessary, a spica.

Fourth, bone transplant operation.

Fifth, at appropriate times, massage, baking and diathermy.

Sixth, in sacroiliac subluxation, a special manipulation has proved of value in many cases. The patient is placed face down on the table. The surgeon stands on a box or on the table, and grasps the patient by the ankles, the patient raises his body on his elbows, grasping the sides of the table firmly with his hands. Then the surgeon abducts the leg moderately with a strong steady traction on the affected side, while an assistant exerts firm pressure over the sacrum for a few minutes. The relief is sometimes immediate, but of course must be followed up with mechanical support for at least four months' time.

Seventh, any deformity, such as a shortened leg, flat foot, etc., should be corrected.

NECROLOGY

Albert Ham Sturtevant
Augusta, 1870-1928

Soon after advising a patient in his office, and being then apparently in his usual good health, Dr. Sturtevant died suddenly from apoplexy on the 21st of June. Some years ago he suffered from a fracture of the skull, caused by a motor car accident, and the results of that injury may have shortened his life. His record in the medical history of Maine was good.

He was born in Dexter, November 2, 1870, the son of Edward Chandler and Mary Elizabeth Ham Sturtevant, educated in the common schools, and then studied pharmacy in all its branches in two or three different places in Maine. His mind then naturally turned to the practice of medicine, and in due season he obtained his degree at the Bowdoin Medical School in 1899. He was then chosen an interne at the Maine General Hospital, where he was for one year of service a man of great value to the staff. He studied later in the Metropolitan medical schools of London, England, and was then well educated for a successful practitioner. Establishing himself in Augusta in 1900, he spent there the rest of his life, an active surgeon and physician, most highly esteemed by a large circle of admiring and satisfied patients. He was also of great service as surgeon to the Augusta General Hospital and labored steadily for progress in medicine and surgery. He was a first-rate clinical educator for students and nurses, efficient and painstaking, spoke often at medical meetings, but rarely wrote any papers on medicine.

Soon after settling in Augusta, Dr. Sturtevant married Miss Ann Louise

Pierce, daughter of Frank and Emma Adelaide Hutchinson Pierce, and is survived by her, and by two daughters.

J. A. S.

Alexander Carlisle Hagerthy
Ellsworth, 1847-1928

With an unequalled record in this country of elections as mayor of the city in which he practiced, Dr. Hagerthy, eleven times chosen mayor of Ellsworth, now passes along into the medical history of Maine. He fell from our ranks July 9th, after a long illness from diabetes and its complications. He was a great figure in medical and political Maine, serving in addition to his repeated terms as mayor of Ellsworth, he has served in the Maine House and Senate, and in 1903 he came very near being nominated for governor of the State.

A son of Daniel and Mary Hagerthy, of Surry, he was born in that town November 23, 1847, educated in the public schools and at Castine Normal. Setting out in life with determination to be a physician, he went on into medical studies despite many obstacles, and after attending lectures at the Medical School of the University of Vermont, he obtained his degree at the Long Island Hospital Medical School in 1874. He then practiced in Steuben and Sedgwick and finally established himself for life in Ellsworth, having practiced there more than forty years at the time of his death. He was a steady practitioner,

a first-rate business man, and a reliable politician. As mayor he asked for reasonable taxes, insisted that they should be paid promptly, and the proceeds used economically for all concerned. The people must get good value for their money, was his policy. He added steadily to his visible property, contributed liberally to useful objects, was a Trustee of the State Hospital, and held many offices, fraternal and medical.

Early in life he was the busy country doctor, sleeping more in his carriage than in his bed and ever ready for emergencies. As a city practitioner, he let nothing interfere with help for those who needed his services.

He married Medilla, daughter of John and Sarah Green, of Mt. Desert, and is survived by her, a daughter, two brothers and a sister.

The successful political career of our departed comrade speaks for his geniality, and his extensive practice testifies to his mental and medical ability and popularity.

J. A. S.

Daniel Alden Barrell
Auburn, 1877-1928

Well known in his place of practice and in the surrounding county as a surgeon of high repute, Dr. Barrell died soon after a serious operation for gallstones July 19th. He was doing apparently very well, when complications ended his valuable career.

He was born in Turner, April 6, 1877, the son of Charles Hayden and

Laura Jane Crafts Barrell, studied at the Edward Little High School in Auburn, and obtained his degree at the Bowdoin Medical School in 1901. Soon after establishing himself in Freedom, he turned to surgery, became an intern at the Central Maine General Hospital in Auburn, and ultimately a chief surgeon in that institution. His results were excellent, his practice extensive.

He married Miss Martha Louise McFarlane, daughter of Elmer and Emma Lees Ballis, of Auburn, and is survived by her. His reputation of a skillful surgeon was applauded by his associates and as a man he was highly esteemed. Finally, he was a good example to the members of the County Medical Society for steady attendance on meetings and always having something to say in the discussions. His wonderful bravery in facing for two years an incurable malady endeared him to all who knew of his impending misfortune.

J. A. S.

Willie Mabra Pease
Dixfield, 1855-1928

Dr. Pease, at one time President of the Oxford County Medical Society and a useful country practitioner in Dixfield, died suddenly, April 1, 1928. His useful career may be briefly summed up in this manner: He was born November 22, 1855, at Winstead, Connecticut, studied there and at the medical school of Vermont at Burling-

ton, graduating there with highest honors in 1882. He practiced in Massachusetts until 1891, when he attended post graduate schools in New York and settled in Dixfield in 1894 for the rest of his life. He was health

officer of the town for several years, prominent in medical and fraternal societies, and in 1885 was married to Miss Cora Hubbard, of New Haven, Connecticut, who survives him.

J. A. S.

COUNTY NEWS AND NOTES

Kennebec County Medical Association

The midsummer meeting of the Kennebec County Medical Association was held at Lakewood, Skowhegan, Me., July 27, 1928.

The Somerset and Franklin County Medical Associations were invited to meet with us, also the ladies.

The meeting was called to order at 3.00 P. M., by President Richard H. Stubbs.

Dr. Fred H. Freeman, of Pittsfield, was admitted to membership.

The application for membership of Dr. William James Young, of Togus, was read and referred to the Board of Censors.

Scientific program—Paper, "Infection and Resistance," by Mortimer Warren, M. D., Portland, Me.

Discussion by Herbert E. Thompson, M. D., Bangor, Me.

Paper, "Observations on Blood Pressure," by William E. Preble, M. D., Boston, Mass.

Paper, "The Role of Latent and Active Infection in Joint Pathology,"

illustrated by moving pictures, by W. T. MacAusland, M. D., Boston, Mass.

These papers were very instructive, and brought out many interesting points.

Dinner was served at the Inn, at 6.00 P. M. Theatre in the evening.

This was an unusual interesting meeting. There was a good attendance from the Somerset and Franklin Counties.

The following members of the Kennebec County Medical Association were present: Drs. E. W. Boyer, A. Davreau, J. P. Goodrich, F. T. Hill, H. F. Hill, B. P. Hurd, A. H. McQuillan, P. S. Merrill, J. O. Piper, J. E. Poulin, C. G. Rancourt and E. H. Risley, of Waterville; F. H. Badger and L. D. Herring, of Winthrop; E. E. Ladd, of Readfield; B. B. Sanborn, of New Jersey; J. F. Shaw, of Fairfield; R. D. Simmons, of Gardiner; H. E. Williams, of Mt. Vernon; G. R. Campbell, F. R. Carter, G. A. Coombs, G. H. Coombs, N. B. Murphy, M. A. Priest, R. H. Stubbs and O. W. Turner, of Augusta.

Respectfully submitted,

FREDERICK R. CARTER, M. D.,
Secretary.

NOTICES

Chicago's Greatest Radiological Convention

The Radiological Society of North America will hold its fourteenth Annual convention in Chicago, December 3rd to 7th, inclusive, 1928. The Drake Hotel, Lake Shore Drive and North Michigan Avenue, has been selected as the headquarters. We are assured of ample accommodations, exceptionally reasonable rates, and of the best and most efficient service.

Make your plans for this year include Chicago's greatest radiological convention. Every physician who is interested in this branch of diagnosis and therapy is welcome.

There are no registration fees, no additional expense. Plans are under way to secure reduced transportation rates.

The Ladies' Local Reception Committee is making plans for the entertainment of all visiting ladies. These plans include theater parties, luncheons, shopping tours and sight-seeing trips, with generous hospitality extended to all visitors.

Much attention is being given to arranging for scientific and commercial exhibits. These exhibits will afford a post-graduate course of instruction in nearly every branch of medical science. Clinics covering radiological problems, as well as other branches of medicine, will be given every day during the session. We are assured by the Program Committee of an instructive and interesting scientific session and a program upon which will appear representative men from all sections of this country and Europe.

Start to make your plans to attend now. This means *you*. Many papers on general diagnosis and therapy will

be read and discussed during the scientific Session.

Bring the wife and family to Chicago, the hub of the United States, with theaters, parks, boulevards and shopping districts second to none.

The location of our headquarters at the Drake Hotel will be found especially convenient. Therefore, make your plans to attend this meeting now. You cannot afford to miss this fourteenth annual session of the Radiological Society at Chicago. Reservations should be made early. Communicate with Chairman of Hotels and Lodgings committee, T. J. Ronayne, M. D., West Suburban Hospital, Chicago, Ill., or direct with Drake Hotel, Chicago, Ill.

Interstate Post Graduate Medical Association of North America

The annual assembly of the Interstate Post Graduate Medical Association of North America will be held in the City of Atlanta, Ga., Oct. 15th to 19th (1928) inclusive. All medical men in good standing are privileged to register, and all are cordially invited to attend. Dr. Geo. W. Crile is chairman of the program committee. Eighty-two renowned clinicians and teachers from all sections of the United States and Canada, and from several European countries, have definitely accepted places on the program.

A complete program and folder of information will be mailed about four to six weeks in advance of the opening of the assembly, to all medical men in good standing, as listed in the latest Directory of the American Medical Association.

**United States Public Health Service
First-Aid Methods for Treating the Injured**

Surgeon General H. S. Cumming, of the United States Public Health Service, advises that everyone become familiar with first-aid methods for treating the injured. First aid has been defined as the temporary care of an injured person by simple, common-sense methods, based on principles of medicine and surgery, that may be applied easily by persons not professionally trained in those subjects. It should be noted that the work of first aid ceases when the injured person has been turned over to the care of a physician.

When it is remembered that over 28,000 persons are killed in the United States each year by traffic accidents, that is, by automobile, railroad, street car accidents, etc., over 13,000 by falls, more than 6,000 each by burns and drowning, and more than 27,000 by other accidental means, or a total of more than 80,000 persons killed and over two million additional seriously injured by accidents in the United States each year, the importance of first-aid care is at once obvious. The above does not include the minor injuries, for which there are no statistics at the present time.

The common injuries include wounds with bleeding and possible infections, dislocation and fracture of bones, burns, including those caused by chemicals and

asphyxia, or cessation of respiration.

In summarizing, the most important thing in the care of the injured person is PREVENTION, the reduction of accidents to a minimum by education and legislation. But as this minimum can never be zero, it is well to bear in mind the fundamental principles in first-aid care, which are as follows:

1. Asepsis or cleanliness in caring for open wounds.
2. Control of hemorrhage by pressure and position of injured part.
3. Treatment of shock by keeping patient at rest and warm, and by giving simple stimulants.
4. Artificial respiration in asphyxia, electric shock, etc., combined with the use of pure oxygen in carbon monoxide cases.
5. Asepsis in treatment of burns; protection from air if this can be done with aseptic method; antisepsis and some relief of pain by use of picric acid gauze.
6. Immobilization of dislocations and fractures.
7. Transportation by methods that will not increase the extent of the injury.

In addition to the benefits gained by the early care of the injured, first aid has been found actually to tend to lower accidents by making people more careful.

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True Oil of Melaleuca leucadendron (the one used) is at present commanding widespread attention, owing to its active constituents, Terpeneol, Terpenyl-acetate, Veraldehyde and Benzaldehyde ($C_{10}H_{18}O$) which abound in the true unadulterated product. This oil is capable of producing a local irritation affecting the deeper tissues while the Menthol exercises a local anodyne effect.

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All papers, case reports, etc., should be typewritten when possible.

Proof-sheets will be sent to the author when requested.

Communicate with the printer early regarding reprints, as the best rates can be had during time that the paper is on the press for the Journal.

The Journal assumes no responsibility for opinions expressed by the authors.

VOL. XIX.

SEPTEMBER, 1928

No. 9

MEETING OF HOUSE OF DELEGATES

First Meeting

The first session of the House of Delegates of the Maine Medical Association was called to order at the Hotel Belgrade, June 18, 1928, at 8.00 P. M.

In the absence of President-elect Gilbert, President Twitchell called the meeting to order.

The roll-call disclosed a quorum present.

President Twitchell: We have a large amount of business to transact, and not the least important is the consideration and adoption of the new constitution and by-laws. I will ask the Secretary to explain the proposed changes.

Secretary Bryant explained in detail the new provisions in the proposed constitution and by-laws.

President-elect Gilbert, returning from a trip out of the state, assumed the chair.

After a prolonged discussion by Drs. Neil, Cook, Sturgis, Bryant and Powell, on motion of Dr. Marsh, duly seconded, the new constitution and by-laws, modi-

fied to meet suggested changes, was adopted.

The President-elect: We will now listen to the report of the Secretary-Treasurer.

Dr. Bryant: The report of the Secretary is in the May JOURNAL, and as we have to go to press before the year is closed, we have to give a supplementary report each year. The report of the Secretary is simply on the matter of the number of men in each county society as compared with 1927.

Androscoggin in 1927 had 68; new members 6; transferred 1; present number 75, an increase of 7.

Aroostook County in 1927 had 48 members; 1 moved away, leaving 47.

Cumberland in 1927 had 199 members; 6 new members; 2 transferred; 1 moved away; 3 died; 1 dropped from the rolls, leaving a total of 202.

Franklin, 15 members; 2 new members; 1 moved away, leaving 16.

Hancock in 1927 had 28 members; 1 moved away, leaving 27.

Kennebec had 76; 6 new members;

1 transferred; 1 dropped, leaving 82 at present.

Knox had 32; 1 new member; 1 transferred; 1 resigned, leaving 33.

Oxford had 38 members in 1927; 1 new member; 2 died, leaving 37.

Penobscot had 104 members; 2 new members; 2 moved; 1 died, leaving a total of 103.

Piscataquis had 14 members in 1927; 1 new member; total, 15.

Sagadahoc had 15 and remains the same.

Somerset had 31 in 1927; 2 moved; 1 died; 1 dropped, leaving 27.

Waldo had 13; 1 moved; 1 died, leaving 11.

Washington had 35; 1 died, leaving 34.

York had 67 members; 2 moved; 3 died; 1 resigned, leaving 61.

Paying direct, 10; 1 has resigned, leaving 9.

Totals in 1927, 793; 25 new members; 5 transferred; 11 moved; 12 died; 3 resigned; 3 dropped, leaving a total membership of 794, an increase of one member.

On motion, duly seconded, it was voted that the Secretary's report be accepted and placed on file.

HONORARY MEMBERSHIP.

The Secretary: While Article IV of the Constitution provides for honorary membership in the Maine Medical Association for those physicians in good standing who have continuously practiced medicine for fifty years and have been similarly honored by their county association, there are only

a few counties who have so honored any of their members. The majority have not. Shall the House act on those names available or wait one year in order to give all the county societies time to take similar action?

After a general discussion by Drs. Sturgis, Garcelon, McNeil, Cook, Kershner, Ellingwood, Stewart, Powell, Goodwin and Russell, Dr. Garcelon moved that all physicians recommended by their respective county societies before August 10, 1928, should be given honorary membership in the state association.

This motion was seconded and carried.

ANDROSCOGGIN COUNTY

A. M. Garcelon, Lewiston.
H. L. Irish, Auburn.
C. E. Norton, Lewiston.
T. J. Fitzmaurice, Lewiston.
C. E. Williams, Auburn.

AROOSTOOK COUNTY

W. W. White, Houlton.

CUMBERLAND COUNTY

A. O. Shaw, Portland.
B. F. Dunn, Portland.
J. A. Spalding, Portland.
S. P. Warren, Portland.
G. B. Swasey, Portland.
C. W. Foster, Portland.
E. E. Holt, Portland.
A. S. Thayer, Portland.
C. H. Cumston, Brunswick.

PENOBSCOT COUNTY

W. E. Fellows, Bangor.
W. L. Hunt, Bangor.
G. B. Tibbetts, Bangor.

H. D. Worth, Bangor.

YORK COUNTY

C. P. Thomas, Brewer.

E. D. Jacques, South Berwick.

SAGADAHOC COUNTY

Eben Alden, Thomaston (pays direct).

I. C. Irish, Bowdoinham.

The President-Elect: We will now

WASHINGTON COUNTY

listen to the Treasurer's report.

E. H. Bennett, Lubec.

The Treasurer reported as follows:

W. M. Dienstadt, St. Stephens, N. B.

TREASURER'S REPORT

EXPENDITURES

Journal,		\$1,000.00
Medical defense:		
Locke, Perkins & Williamson,		250.00
Secretary's office:		
Secretary, salary,	\$100.00	
Secretary, telephone,	29.63	
Secretary, miscellaneous expenses,	25.00	
E. M. Clark, stenographer,	325.50	
Supplies, printing, etc.,	10.00	
	—————	490.13
B. L. Bryant, traveling expenses delegate to A. M. A.,		36.00
F. Y. Gilbert, traveling expenses delegate to A. M. A.,		36.00
Annual meeting, 1927:		
Congress Square Hotel,	\$ 52.30	
Clay, stenographer and transcripts of meeting,	123.48	
G. B. Dame, signs,	3.50	
T. R. Anderson and E. M. Clark, expenses—registration,	16.80	
L. L. Marshall Printing Co.,	3.85	
Dr. E. E. Holt, Jr.,	25.00	
Speakers:		
J. Stewart Rodman,	42.44	
Daniel Fiske Jones,	9.70	
G. G. Duncan,	39.00	
	—————	316.07
New England Council meetings,		99.55
	\$27.50	
Secretaries' meetings,	32.00	
	—————	59.50
President's expenses, 1926-7,		93.43
President's expenses, 1927-8,		100.00

Legislative Committee, 1926-7,		\$20.95
Legislative Committee, 1927-8,		
Gerrish,	\$17.50	
Phillips,	17.32	
Mitchell,	27.50	
	<hr/>	62.32
Cancer Committee,		1.32
Annual meeting, 1928:		
Programs, envelopes, postage,		87.45
Blake, Barrows & Brown, bond (Treasurer),		5.00
J. W. Bowers, refund,		2.00
G. B. Derby, trucking records,		3.50
J. A. Spalding, half-tones for obituaries,		18.00
		<hr/>
		\$2,681.22

CREDITS

Cash on hand,		\$4,293.35
Securities:		
Two bonds, Mortgage Bond Co. of New York, Nos. 1261-62, $5\frac{1}{2}\%$,	\$2,000.00	
Two bonds, Commonwealth of Aus- tralia, Nos. 5033-34, 5% ,	2,000.00	
One bond, City Water Co. of Chat- tanooga, No. 1973, $5\frac{1}{2}\%$,	1,000.00	
One bond, Prudence Bond Corpora- tion, First Mortgage Coll., $5\frac{1}{2}\%$,	1,000.00	
	<hr/>	6,000.00
(Included in above is bond of Thayer fund, \$1,122.40.)		
Interest on securities,		242.50
Difference on exchange of bonds,		197.42
Savings account of Venereal Disease Com- mittee (included in cash on hand),	\$656.82	
Interest on above,		26.65
Cash from dues,		3,210.00
Interest on deposits,		49.32
		<hr/>
Total credits,		\$14,019.24
Total expenditures,		\$2,681.22
		<hr/>
Balance—cash and securities,		\$11,338.02

Cash in checking account,	\$3,485.96	
Cash in savings account (coupons from bonds with interest on same),	1,168.59	
Cash in savings account (Venereal Disease Committee fund with interest),	683.47	\$5,338.02
	—————	
Securities,		6,000.00
		————— \$11,338.02
B. L. BRYANT, <i>Treasurer</i> .		

The President-elect: I am sure you will all agree that that is a very satisfactory Treasurer's report.

On motion, duly seconded, it was voted that the report be accepted.

President-elect Gilbert: At the 1927 meeting of the House of Delegates, the Legislative Committee was instructed to seek a conference with the various cults with the view of securing a composite board. Dr. Gerrish, chairman, will report for the committee.

Dr. Gerrish: Mr. Chairman and Members of the House of Delegates: In accordance with the wishes of this House of Delegates we have employed counsel, and in joint committee we have carefully considered the work of the lawyers, Oaks and Sawtelle. They have acted solely on the platform as presented by the joint committees, and we present to you to-day the result of our combined efforts.

The bill is in ten short sections. Let me first summarize beforehand for you the chief points for discussion. Sections One and Two have to do with the organization of this board. The personnel is fifty-fifty, three osteopaths and three physicians.

Section Three has to do with the applicant's qualifications, *i. e.*,

1. Class A, high school diploma.
2. A medical or osteopathic diploma from a college or university giving four years' course of eight months each, and recognized by the board.

Section Four is the most important. It calls for examination by an applicant in anatomy, physiology, pathology, bacteriology, sanitation, chemistry, toxicology, dietetics, hygiene, gynecology, obstetrics, diagnosis and surgery—thirteen basic subjects. Your committee feels that any applicant holding a proper diploma and passing an examination in these subjects will be a safe practitioner for any community.

The other vital question in Section Four is whether we shall absorb all present osteopaths without examination before this board.

Section Five relates to the use of titles and the penalties imposed for misuse.

Section Six relates to the observance of the rules relating to control of contagious disease, reporting of births and deaths, and matters of public health.

Section Seven relates to the proper enforcement of the act.

Section Eight relates to fees and their disposition.

Section Nine enumerates those heal-

ers who shall not come under this act.

Section Ten repeals former legislation.

This bill was discussed at length by Drs. Garcelon, Sturgis, Bryant, Twitchell, Kershner, Stewart, Ellingwood, McNeil, Powell and Marsh. On motion of Dr. Marsh, it was voted that the discussion cease and the House proceed to other business.

The President-elect: Dr. Campbell's committee was a committee on the insurance problem, and in the absence of Dr. Campbell, Dr. Young will read that report.

(Dr. Young, reading.) Mr. President and Members of the House of Delegates: I have been asked to present the blanket insurance which has been adopted by the Medical Society of the State of New Jersey. It is backed by the Commonwealth Casualty Company and the Standard Insurance Company of Philadelphia, a blanket insurance for all medical men in the state, members of the association. Accident and health contract, \$50.00 a week for any illness or accident, and \$25.00 a week for partial illness and accident, that, of course, to cover any illness which arises in the future, and not any illness from which the candidate already suffers. \$5,000.00 if killed from accident. All the above items doubled if accident occurs in a public conveyance. The rates are rather interesting. Rates up to fifty years next birthday, \$60.00 a year; rates over fifty and up to sixty, \$70.00 a year; over sixty years of age, \$80.00 a year. No examination. This

policy is not the regular commercial policy; it was made up expressly for the doctors of the medical society, is identical to the one which has already been accepted by the New Jersey Medical Society and has proved a great success. The policy is promptly issued to any member who applies.

Secondly, automobile, fire and theft insurance. By insuring under a group, such as the Maine Medical Association, we are able to offer insurance at a reduction of 20%, automobile liability and property damage 15% reduction by insuring under a group. All the insurance companies are regular stock companies and are strong financially.

I offer this for the House to discuss further if they care to. As I understand it, the New Jersey Association has had it for about a year and are very well satisfied with it. It is quite a saving in rates, and there is also the advantage of not dropping a man after he gets to be sixty years of age, as so many of these insurance policies do.

On motion, duly seconded, it was voted to accept the report, and on further motion, duly seconded, it was voted to refer it to the Reference Committee.

The President-elect: I will appoint the following on the Nominating Committee: Drs. Ellingwood, Gerrish, McNeil, Stewart, Smith, of Winterport, and Cook.

I will appoint as Reference Committee, Drs. Harry McNeil, George Young, W. E. Kershner, William Holt and George Campbell. That committee

will have to take these reports as submitted in the JOURNAL, go over them tonight and make recommendations tomorrow as to what action they feel that the House ought to take with reference to them.

Adjourned until tomorrow morning immediately following the General Session.

Second Meeting

TUESDAY, JUNE 19, 1928, 11.30 A. M.

The meeting was called to order by President-elect Gilbert.

The Chairman: Now, gentlemen, before starting with the business, I just want you to know that Dr. Parker, of Manchester, N. H., President of the New England Medical Council, is with us in the back of the room. Will you stand up, Dr. Parker?

(Dr. Parker acknowledged by standing and was greeted with applause, also Dr. Luce, one of the members of the Council, of Portsmouth, N. H.)

The Chairman: We will now hear the report of the Reference Committee.

Dr. McNeil: Your Committee on Reference begs leave to report: We again endorse the Secretaries' meetings which are held twice a year, once in Bangor and once in Portland, and urge that these be continued, as they bring together the Secretaries of the county medical societies and the Councilors, and are meetings that should be held at least twice a year, and possibly we would urge that the location be changed to other sections of the state in order to bring more men in contact with them.

On motion by Dr. McNeil, duly sec-

onded, it was voted to adopt the above report.

Dr. McNeil, continuing report:

PUBLIC HEALTH

We regret very much the resignation of Walter D. Thurber, Secretary of the Maine Public Health Association, who was obliged to resign on account of ill health. His work is well known in the State, and by his energy public health was stimulated. He made many suggestions, and his work in the placing of nurses in counties has been a wonderful boom to the cause of public health. We hope that his recovery from his illness will allow him to come back to the State of Maine and continue the work which has been done by him in such a wonderful way. He gave his time and thought to public health, and his close contact with the Maine Medical Society advertised Maine as a great center where public health was given first thought.

On motion by Dr. McNeil, duly seconded, it was voted to adopt the report.

Dr. McNeil, continuing his report:

CLINICS

We endorse the clinics that have been held by the Maine Medical Society, in conjunction with the Maine Public Health Association, and urge that these clinics be continued during the coming year. They are of great value to the doctors of Maine. Possibly, as a suggestion, we should urge that more counties be taken in, to bring more men together.

On motion by Dr. McNeil, duly seconded, it was voted to adopt the report.

Dr. McNeil, continuing:

NEW ENGLAND MEDICAL COUNCIL

We endorse the New England Medical Council, and urge that the Maine Medical Association continue to be members thereof, and work out the program which they have started.

On motion by *Dr. McNeil*, duly seconded, it was voted to adopt the report.

Dr. McNeil, continuing his report:

FULL-TIME SECRETARY

Our committee has considered the subject matter of the full-time secretary, and such a secretary we endorse, but would urge that the matter be brought back to the medical societies for action, and that they talk over the subject matter thoroughly and instruct their delegates, at the next annual meeting, as to what course of procedure they would follow in regard to the full-time Secretary of the Maine Medical Association. Such a Secretary, we feel, would be of immense value to Maine, as it would increase both contact and interest in the meetings of the society.

We further urge that the Secretary instruct the Councilors and the county Secretaries once again to bring this matter up at some meeting before the next general meeting of the Maine Medical, and find just what their feelings are on this matter.

On motion by *Dr. McNeil*, duly seconded, it was voted to adopt the report.

Dr. McNeil, continuing:

COUNCILOR'S REPORT

We have gone over the report of the Councilors and endorse the same.

On motion by *Dr. McNeil*, duly seconded, it was voted to adopt the report.

Dr. McNeil, continuing:

STATE HOSPITALS

We have gone over the report of the Committee on State Hospitals and endorse the same.

On motion by *Dr. McNeil*, duly seconded, it was voted to adopt the report.

Dr. McNeil, continuing:

HEALTH IN SCHOOLS

We endorse their report.

On motion by *Dr. McNeil*, duly seconded, it was voted to adopt the report.

Dr. McNeil, continuing:

LEGISLATIVE COMMITTEE

We endorse the report of the Legislative Committee, and as action has been taken by the House of Delegates, would leave that to them for final determination.

On motion by *Dr. McNeil*, duly seconded, it was voted to adopt the report.

Dr. McNeil, continuing:

VENEREAL DISEASES

We endorse their report, and urge that they be kept on to do the good work they have already begun.

On motion by *Dr. McNeil*, duly seconded, it was voted to adopt the report.

Dr. McNeil, continuing:

CANCER COMMITTEE

We endorse their report.

On motion by *Dr. McNeil*, duly seconded, it was voted to adopt the report.

Dr. Neil, continuing:

REPORT OF THE NECROLOGIST

Dr. Spalding has, as usual, been in

charge of the necrology report, and we urge that he keep in charge of that report as usual.

On motion by Dr. McNeil, duly seconded, it was voted to adopt the report.

Dr. McNeil: Now in the matter of blanket insurance, as outlined in the report of Dr. Campbell last night, as read by Dr. Young, of Skowhegan, we urge that that matter be gone into very thoroughly by the Councilors and reported back to the county societies as to what should be done. We feel that it is a big measure and that more information should be had in regard to it. That was the vote last night of the Committee on Reference, and I move that it be adopted.

The motion being duly seconded, prevailed.

The Chairman: Gentlemen, a motion is in order for the adoption of the report as a whole.

Thereupon such motion was made, duly seconded and carried.

The Chairman: Next in order is the report of the Nominating Committee.

Dr. Ellingwood: Mr. Chairman, as you will note by the new by-laws, there have been some changes in committees. The Nominating Committee, at a meeting last evening, nominated the following for the different committees:

Scientific Committee—T. J. Burrage, Portland; J. L. Johnson, Bangor; W. J. Renwick, Auburn.

Legislative Committee—J. D. Phillips, Southwest Harbor; F. W. Mitchell, chairman, Houlton; E. D. Merrill, Dover-Foxcroft.

Committee on Venereal Diseases—

G. H. Coombs, Augusta; H. W. Stanwood, Rumford; H. J. Hunt, Bangor.

Cancer Committee—H. E. Thompson, Bangor; Mortimer Warren, chairman, Portland; Barbara Hunt, Bangor.

Committee on Medical Education and Hospitals—C. M. Robinson, Portland; G. H. Stone, Bangor; E. H. Risley, Waterville.

Committee on Medical Defense—E. G. Abbott, Portland; B. L. Bryant, Secretary, Bangor; W. G. Chamberlain, Fort Fairfield; E. V. Call, Lewiston; G. E. Young, Skowhegan; Allan Woodcock, Bangor.

Committee on Public Relations—F. W. Mann, Houlton; R. D. Small, Portland; C. F. Kendall, Augusta; G. A. Coombs, Augusta; C. W. Bell, Strong.

Necrologist—J. A. Spalding, Portland.

Delegates to A. M. A.—B. L. Bryant, Bangor; alternate, W. E. Webber, Lewiston; F. Y. Gilbert, Portland; alternate, L. P. Gerrish, Lisbon Falls.

Delegate to National Council—H. F. Twitchell, Portland.

Delegates to State Societies—New Hampshire, T. A. Foster, Portland; Vermont, G. E. Young, Skowhegan; Massachusetts, Forrest Ames, Bangor; Rhode Island, G. A. Campbell, Augusta; Connecticut, E. S. Merrill, Bangor.

New England Council—President; Secretary; George E. Young, Skowhegan; L. P. Gerrish, Lisbon Falls; William Ellingwood, Rockland.

Councilors—Dr. A. K. P. Smith, Bangor, Sixth District; Dr. Ralph Wakefield, Bar Harbor, Fifth District.

On motion, duly seconded, it was voted to accept the report.

The Secretary: Mr. Chairman, I have just received the following telegram from Poland Springs:

"MAINE MEDICAL ASSN.,
Belgrade Lakes, Me.

"The Maine Pharmaceutical Association, in convention assembled, extend to the Maine Medical Association cordial greetings and best wishes for a pleasant and profitable meeting.

JAMES H. ALLEN, *Secretary.*"

I have answered, subject to your approval, that "The Maine Medical Association appreciates the cordial greetings of the Maine Pharmaceutical Association and thanks it for the same.

B. L. BRYANT, *Secretary.*"

On motion, duly seconded, it was voted that the telegram as sent by the Secretary be accepted.

The Chairman: The Treasurer will now give us the budget for the ensuing year.

BUDGET

President's expenses,	\$ 100.00
Salary of Secretary and Treasurer,	100.00
Stenographer and traveling expenses of Secretary,	400.00
Legislative Committee,	100.00
Other committees,	100.00
Councilors,	100.00
Journal,	1,000.00
Delegates A. M. A.,	500.00
Clinics,	300.00
Medical defense,	300.00
Annual meeting,	300.00
Secretaries' meetings,	75.00
New England Council,	200.00
	<hr/>
	\$3,575.00

On motion by Dr. Bryant, duly seconded, it was voted to accept the foregoing budget.

In the absence of Dr. Hill, Dr. Ellingwood introduced the following resolutions:

Recognizing the fact that the most effective means for the prevention of deafness consists in the early detection of hearing impairment, thereby giving opportunity for prompt removal of contributing causes, and believing it to be one of the most important functions of our public school authorities to safeguard the integrity of the special sense organs, as well as the general health of the school child, be it

Resolved, By the Maine Medical Association, in convention assembled, that it heartily favors the provision by our public school authorities for regular periodic examinations of the hearing acuity of all public school children, such examinations to be adequate to detect even slight degrees of hearing loss; and be it further

Resolved, That a committee on the "Hard-of-Hearing Child" be appointed, in accordance with the by-laws of the Maine Medical Association, such committee to interest itself in this work and to endeavor to procure for the public school system of Maine adequate periodic examinations for hearing acuity; and be it further

Resolved, That the constituent County Medical Associations be requested to actively interest themselves in this work in their respective counties.

On motion, duly seconded, it was voted to adopt the foregoing resolutions.

The Chairman: That calls for the appointment of a committee.

On motion by Dr. McNeil, duly seconded, it was voted that a committee be appointed by the Chair: Drs. Fisher, Kershner, Ellingwood, Hilland Mitchell.

The Chairman: As this will be the last meeting of the House of Delegates, I think some sort of resolution should be passed in recognition of the work of the Kennebec County Medical Society in entertaining, and also to our hosts, if somebody will make that motion.

Thereupon, on motion by Dr. Sturgis, duly seconded, it was voted that the thanks of the association be extended to the Belgrade Lakes Hotel Company and to the Kennebec County Medical Society for the entertainment at the 1928 session.

The Chairman: Now as to the place of our next meeting.

On motion by Dr. McNeil, duly seconded, it was voted that the matter be left in the hands of the Council to arrange for a meeting at Poland Springs if possible; if not, then Portland.

The Chairman: Before we adjourn finally, I think it would be well to have a few words from Dr. Parker, late President of the New Hampshire Medical Society. Will Dr. Parker favor us with a few words? [Applause.]

Dr. Parker: Mr. Chairman, and Members of the House of Delegates: I have very little to say at this time. I know you are anxious to get your lunch. It is a great pleasure to come over to Maine. It was a great pleasure to be here last year. I am very much impressed with your meetings, the two

that I have attended, and I am very much impressed and pleased with the beautiful spot where you are holding your meeting this year. We, as you know, have our Medical Council meeting this afternoon, and I believe I am within my authority in extending to you a cordial invitation to attend that meeting. There are two subjects coming up that are, I believe, of quite vital interest. We will finish the report of the Committee on Reciprocity for the Practice of Medicine—reciprocity between the New England States. That subject was taken up at the last meeting, and this committee has put in quite a little work and is going to report its recommendations this afternoon. There will be some discussion on it, and it might be of interest for you to hear it. It is a subject which is rather intangible so far, but we hope to make it more tangible and perhaps be able to recommend something to the state societies that will be constructive. Then we are going to take up after that a new subject, "Popular Education Relating to the Practice of Medicine and the Problems Incident Thereto"—education of the public with reference to the cults, education of the public with respect to public health problems. That will be fully discussed, and, after the regular discussion, the round-table discussion, with an attempt to work out something constructive. As you all know, the public mind seems to have changed radically in the last ten or fifteen years. They seem to be willing to grasp at most anything that appears as a friend in the newspapers or over the radio, put to them

in apparently what is a logical and pleasing way. Now, finally can we change in our methods of merchandising? I think you will agree with me that we never have been in a position to offer the public more scientific, honest-to-God medicine than we are at the present time; but I think you will also agree with me that we are about the rottenest gang of merchandisers that ever came down the pike. We have got to change our methods of merchandising our goods in a perfectly honest and ethical way, and put what we have to sell—if you want to put it into commercial parlance—before the public so that they will know and be able to recognize the difference between a scientific honest-to-God proposition and what the cults are putting out. Now that is something we are going to discuss this afternoon, and it seems to me that it will open up a subject worth listening to, and we hope we can get somewhere with it. I thank you for this opportunity to speak, and I am awfully pleased to be here and meet you all again. [Applause.]

The Chairman: I am sure we are glad to have Dr. Parker with us. Now, unless there is some other matter to come before the House, we will adjourn finally for this session. The Chair will entertain a motion to adjourn.

The two Councilors to be elected this year were not put on this list. Dr. Smith is up for election to succeed himself, and Dr. Wakefield, of Bar Harbor, takes the place of Dr. Knowlton, of Ellsworth. Those were nominated by the Nominating Committee.

On motion by Dr. McNeil, duly seconded, it was voted that Dr. Smith and Dr. Wakefield serve as Councilors.

Voted to adjourn.

Special Meeting

Abstract of the special meeting of the House of Delegates held at the Belgrade Lakes Hotel, Wednesday morning, June 20, 1928, at 8.30 A. M.

The meeting was called to order by President-elect Gilbert, who explained that in view of the discussion of the legislative problem in the New England Medical Council, and the apparent dissatisfaction among some of our members as to the previous action, he had called a special meeting and invited members of the Council who were staying over to be present. He then introduced Dr. Birney, President of the Massachusetts Medical Association.

Dr. Birney prefaced his remarks by saying that while this was a common problem to all the states, each state must seek its own solution. It was not his intention or desire to be placed in the position of advising Maine how to meet this problem. Having served on the Board of Medical Registration, he spoke of the manner in which Massachusetts met the question and reviewed the methods followed by other states. He gave a very fair and comprehensive presentation of the whole question.

Dr. Stone, president of the New England Medical Council, stated that he felt very strongly that this was a problem to be worked out by each state. He also reminded us that whatever solution may be found, one fact

must be kept uppermost in our minds, viz., we are seeking to protect the public from untrained practitioners, not to better the medical profession.

After a prolonged discussion, entered into by Drs. Luce, Portsmouth, N. H., Mann, Warren, Bryant, Kershner, Gerrish, Sturgis, Stevens, Young, Snipe, Stewart, Powell, Ellingwood and Parker, and the answering of many questions by Drs. Birney and Stone, it was moved that the committee's recommendations be accepted and that the committee be at liberty to call on any

member for support at any legislative hearing. The motion was seconded.

After further discussion, and after certain proposed amendments were lost, this motion was carried.

It was further moved that the House of Delegates place this matter fairly and squarely in the hands of the Legislative Committee, and that they alone shall select the men whom they wish to go to Augusta to take complete charge of this work. This motion was seconded and carried. The meeting was then adjourned.

TRANSCRIPT OF PROCEEDINGS AT THE SEVENTY-SIXTH ANNUAL MEETING OF THE MAINE MEDICAL ASSOCIATION

First General Session

TUESDAY, JUNE 19, 9.00 A. M.

The first general session was called to order by President Twitchell, at Belgrade Lakes Hotel.

Invocation by the Rev. William A. Smith, of Waterville.

The President: The seventy-sixth session of the Maine Medical Association is now open. I wish to announce that the newspapers furnished us here are furnished free by the *Waterville Sentinel*, *Portland Evening News* and the *Portland Press-Herald*.

I also want at this time to call your attention to the commercial exhibits. We have some very wonderful exhibits here. These exhibitors have come here, paid for their floor space, and it is only fair to them, and just to the committee which has arranged for these exhibits,

that we should give them a few minutes of our spare time. I hope you will all visit the commercial exhibits.

A telegram has just come to us, as follows:

"Poland Springs, Me., June 19, 1928.
MAINE MEDICAL ASSN.,

Belgrade Lakes, Me.

The Maine Pharmaceutical Association, in convention assembled, extend to the Maine Medical Association cordial greetings and best wishes for a pleasant and profitable meeting.

JAMES H. ALLEN, *Secretary.*"

The first paper this morning is "Orthopedic Aspect of Low Back Pain," by Dr. E. L. Herlihy, Bangor.

Dr. Herlihy reads.

The paper was discussed by Dr. Lee, of Boston, and Dr. Leighton, of Portland.

The President: Our rule is that all papers presented should be presented inside of twenty minutes, and all discussions shall be limited to five minutes, and the Chair will be obliged to enforce that rule quite rigidly on account of the length of the program. The next paper is "Acute Endocarditis," by Dr. J. O. Piper, of Waterville.

Dr. Piper reads.

This paper was discussed by Dr. E. C. Higgins.

The President: We have some visitors here from other states, and I wish to extend to them the privileges of the floor in discussing these papers.

The discussion of Dr. Piper's paper was then continued by Dr. Blumer, of New Haven, Conn., Dr. S. A. Levine, of Boston, and Dr. Warren, of Portland.

The President: The next paper is "Studies in Breast Tumors," by Dr. Mortimer Warren, of Portland.

Dr. Warren reads.

Dr. Warren: Mr. President, Dr. Eugene E. O'Donnell should have been along with me. We worked this up together and we are equally guilty.

During the reading of this paper, lantern slides were shown illustrating different phases of breast tumors. The paper was discussed by Dr. H. E. Thompson, of Bangor, Dr. Risley, of Waterville, and Dr. Gottlieb, of Lewiston.

The next paper is "Endoscopic Diagnosis," by Dr. F. T. Hill, of Waterville.

Dr. Hill reads.

This paper was discussed by Dr. Johnson.

The President: If there is no further discussion of this paper on "Endoscopic Diagnosis," we will call on Dr. F. T. Hill for his next paper, "The Hard-of-Hearing Child."

Dr. Hill reads.

This paper was discussed by Dr. S. E. Fisher, of Portland, Hon. F. Harold F. Dubord, Mayor of Waterville, Dr. John Bowers, of Portland, Dr. Moulton, of Hartland, and Dr. Owen Smith, of Portland.

Adjourned.

Second General Session

TUESDAY, JUNE 19, 1928, 2.00 P. M.

The session was called to order by Second Vice-President, Dr. C. W. Bell, of Strong.

The Chairman: We will listen to an address by our President, Dr. Twitchell.

President Twitchell reads.

(President Twitchell takes the chair.)

The President: First on the program is "The Heart in Infections," by Dr. S. A. Levine, of Boston.

Dr. Levine reads.

The paper was discussed by Dr. Drake.

The President: I think I will at this time introduce delegates from other states. I will first call upon Dr. Seldom Burden Overlock, from Connecticut, if he is present. [No response.] Is Dr. Frank Henry Wheeler here? [No response.] Are there any delegates present from any other state?

Dr. Marsh, New Hampshire: Mr. President and Members of the Maine Medical Association: It affords me more than the usual pleasure to represent the New Hampshire Society here to-day, because it gives me an opportunity to renew so many acquaintances and friendships. I was born in Maine, received my education in Maine, and almost all of my people live in Maine. Many times, and especially at a time like this, I wonder why it was that I ever strayed away from such splendid associates. As you know, probably, our society, at its last meeting, adopted the so-called Maine plan of medical defense, and I want to say that in my opinion that is one of the most progressive and constructive things that has ever been developed for the benefit of the medical profession. We owe a considerable debt of gratitude to your society, and particularly to your Secretary, Dr. Bryant, for the splendid assistance he gave us. We owe, of course, a great debt to our own physician, whom so many of you well know, Dr. Luce, of Portsmouth, who really fathered the proposition and made it a workable thing with us. Our last President, Dr. Fitch, acted as a sort of missionary throughout the state last year and made it possible for us to adopt it very easily at the meeting. It seems to me that this measure has many more merits in it than that for which it was originally intended. For its successful operation it seems to me that there must be an unusual amount of co-operation, and it must develop a sense of co-operation among the members of the

profession, and, after all is said and done, it seems to me that the biggest thing before the medical profession to-day is the matter of better co-operation, the creation of a better spirit, a better feeling, more friendships, more tolerance, more patience. I happen to practice medicine in a city where this spirit exists to a very unusual degree. We have quite a few physicians in my city, a city of 18,000, and I want to say that we are all good friends. We work together; we play together. Such things as criticism and unethical things are absolutely unknown. I wish that that same thing existed everywhere, and I think there is a great opportunity for us to do something along those lines. I was very much interested in the address of your President. If he had said nothing but the last paragraph, I would be well repaid for coming down here to hear it. One matter I want briefly to bring to your attention. As Secretary of one of our county societies, I feel that one of the most important things that we have accomplished in New Hampshire for the benefit of our county meetings, and to increase the interest in our meetings, is the organization of the auxiliary. I find in the southern part of our state some of our counties have not quite got the idea yet. You know all of us are more or less ladies' men, and they have a faculty of getting the doctors out to the meetings. We have found that their presence has added materially, not only to the looks of the meetings, but certainly to the attendance, and I want to urge that you go into this thing here

in Maine right off and promote the auxiliary wherever you can do so. [Applause.]

The President: If there are no other delegates present, we will continue with the next paper, "Sterility in the Male," by Dr. M. B. Sanders, of Boston.

Dr. Sanders reads.

The President: To facilitate matters a little bit and to save time, I am going to call for the next paper, and then we will discuss the two together, "Sterility in the Female from the Endocrine Standpoint," by Dr. C. H. Lawrence, of Boston.

Dr. Lawrence reads.

These papers were discussed by Dr. Leighton, of Portland, and Dr. Merrill, of Bangor.

Adjourned.

Third General Session

WEDNESDAY, JUNE 20, 1928, 9.30 A. M.

This session was called to order by the President.

The President: The first paper is "Congenital Syphilis," by Dr. Gottlieb, of Lewiston.

Dr. Gottlieb reads.

This paper was discussed by Dr. W. J. Renwick, of Auburn, and Miss Libby, a Massachusetts clinician, briefly described her work.

The President: The next paper is "Bone and Joint Syphilis," by Dr. H. W. Lamb, of Portland.

Dr. Lamb reads.

This paper was discussed by Dr. Allan Woodcock, of Bangor.

The President: The next paper is

"Visceral Syphilis," by Dr. B. B. Foster, of Portland.

Dr. Foster reads.

This paper was discussed by Dr. E. W. Gehring, of Portland.

The President: The next in order is "Treatment of Certain Cases of Neurosyphilis," by Dr. H. Solomon, of Boston.

Dr. Solomon reads.

The President: Before opening the general discussion, I am going to take this opportunity to introduce to you the delegate from Connecticut, Dr. Wheeler. [Applause.]

Dr. Wheeler: Mr. President and Gentlemen of the Maine Medical Association: I thank you, Mr. President, for giving me this opportunity of presenting to the Maine Medical Association the greetings of the Connecticut Society. I can assure you that Connecticut congratulates you on having reached the mature age of seventy-five years. Undoubtedly you now feel that you have really reached manhood's estate, and Connecticut wishes for you all the usefulness and all the greatness that can possibly come to you, even exceeding that which has existed in the past. I noted last evening, in the paper read by your historian, that at your first birthday, as well as on your seventy-fifth birthday, charlatanism was prominent in the minds of the members of the association. Now I have no doubt that away back in the time when Belshazzar and Nebuchadnezzar, and others of like ilk, were holding "high jinks" in Mesopotamia, and holding their or-

gies in the Hanging Gardens of Babylon, that even then the medical profession was pestered with charlatans and fakirs, and that some of the more solid guys of the profession were saying that the medical profession was going to the demnition bowwows. All through the ages, all down through the centuries which have intervened between then and now, that same thing has been going on. Charlatans, fakirs, isms and cults have arisen, flourished for a day and then passed out, only to be revived sometime later under a different name and a different guise, until to-day we have Christian Science, osteopathy, chiropractic, naturopathy, *et genus omne*. In addition, we have some other conditions which may be considered internal, perhaps. I mean such things as social medicine, industrial medicine, group practice, and so on. Now what all these things portend for the medical profession nobody knows and no one can answer; but as liberty is the price of eternal vigilance, so is it necessary for the usefulness, the honor, the integrity, of the medical profession that we should ever be on the watch. One thing is absolutely essential in all this, and that is a united profession, so that we may be able to present a solid front to all these assaults that are being made upon our profession. I thank you. [Applause.]

Thereupon the symposium on syphilis was further discussed by Dr. Swett, of Portland, Dr. Gottlieb, of Lewiston, and Dr. Warren, of Portland, and was closed by Dr. Solomon, of Boston.

Adjourned.

Fourth General Session

WEDNESDAY, JUNE 20, 1928, 1.30 P. M.

The session was called to order by President Twitchell.

The President: We will now listen to an oration by Dr. Lincoln Davis, of Boston, on "The Value of Diagnostic Curettage before Hysterectomy." Dr. Davis. [Applause.]

Dr. Davis reads.

Dr. Lincoln Davis: Mr. President, and Members of the Maine Medical Association: When my friend, Dr. Risley, asked me to read a paper, as he said, for the Maine Medical Association, I was very glad to accept. He said he wanted a paper on a practical subject. When I received your program and saw that I was down for an oration, I was thunderstruck, because I had prepared no oration; in fact, I am quite incapable of giving an oration, for two reasons. In the first place I am unable to orate, and in the second place I doubt if the subject which I have chosen is suitable for an oration—I doubt if Demosthenes himself could orate on that subject—so, with your indulgence, I will read a paper on a rather humdrum subject, but I think a practical one. The subject is "The Importance of Curettage Preceding Supravaginal Hysterectomy."

Dr. Davis' paper was discussed by Drs. Thompson and Reynolds.

The President: The next paper is "Appendicitis in Children," by Dr. T. A. Foster, of Portland.

Dr. Foster reads.

Dr. Foster's paper was discussed by

Dr. McNeil, of Bangor, Dr. Risley, of Waterville, Dr. Campbell, of Augusta, Dr. Smith, of Winterport, and Dr. Holt, of Portland.

The President: Next on the program is "Traumatic Bile Cist," by Dr. A. H. McQuillan, of Waterville.

Dr. McQuillan reads.

The President: There are a few moments, if anybody wishes to discuss this paper: [No response.] If there is no discussion, we will proceed to the next business, which is a report from the House of Delegates.

Dr. T. A. Foster: Mr. President, is it proper here to make a motion before proceeding with the report of the House of Delegates?

The President: Dr. Foster has the floor.

Dr. Foster: Mr. President, it was my pleasure yesterday to attend the Commencement at Dartmouth, where one of our past Presidents was honored with the degree of Doctor of Letters, namely, Dr. Spalding. I move you, Mr. President, that the Maine Medical Association, through its Secretary, send Dr. Spalding a letter of congratulation.

Dr. Mann: It gives me pleasure to second that motion, Mr. President.

Thereupon the motion prevailed.

The President: We will now listen to the report of the House of Delegates by the Secretary, Dr. Bryant.

Secretary Bryant: The following is the report of the Committee on Reference:

REPORT OF HOUSE OF DELEGATES

Our Committee on Reference begs leave to report:

We again endorse the Secretaries' meetings, which are held twice a year, once in Bangor and once in Portland, and urge that these be continued, as they bring together the Secretaries of the county medical societies and the Councilors of the committees, and are meetings that should be held at least twice a year, and possibly we would urge that the location be changed to other sections of the state, in order to bring more men in contact with them.

PUBLIC HEALTH

We regret very much the resignation of Walter D. Thurber, Secretary of the Maine Public Health Association, who was obliged to resign on account of ill health. His work is well known in the state, and by his energy public health was stimulated. He made many suggestions, and his work in the placing of nurses in counties has been a wonderful boom to the cause of public health. We hope that his recovery from his illness will allow him to come back to the State of Maine and continue the work which has been done by him in such a wonderful way. He gave his time and thought to public health, and his close contact with the Maine Medical Society advertised Maine as a great center where public health was given first thought.

CLINICS

We endorse the clinics that have

been held by the Maine Medical Society, in conjunction with the Maine Public Health Association, and urge that these clinics be continued during the coming year. They are of great value to the doctors of Maine. Possibly, as a suggestion, we should urge that more counties be taken in, to bring more men together.

NEW ENGLAND MEDICAL COUNCIL

We endorse the New England Medical Council, and urge that the Maine Medical Association continue to be members thereof, and work out the program which they have started.

FULL-TIME SECRETARY

Our committee has considered the subject matter of the full-time Secretary, and such a Secretary we endorse, but would urge that the matter be brought back to the medical societies for action, and that they talk over the subject matter thoroughly and instruct their delegates, at the next annual meeting, as to what course of procedure they would follow in regard to the full-time Secretary of the Maine Medical Association. Such a Secretary, we feel, would be of immense value to Maine, as it would increase both contact and interest in the meetings of the society.

We further urge that the Secretary instruct the Councilors and the county Secretaries once again to bring this matter up at some meeting before the next general meeting of the Maine Medical, and find just what their feelings are on this matter.

COUNCILORS' REPORT

We have gone over the report of the Councilors and endorse the same.

STATE HOSPITALS

We have gone over the report of the Committee on State Hospitals and endorse the same.

HEALTH IN SCHOOLS

We endorse their report.

LEGISLATIVE COMMITTEE

We endorse the report of the Legislative Committee, and as action has been taken by the House of Delegates, would leave that to them for final determination.

VENEREAL DISEASES

We endorse their report, and urge that they be kept on to do the good work they have already begun.

CANCER COMMITTEE

We endorse their report.

REPORT OF THE NECROLOGIST

Dr. Spalding has, as usual, been in charge of the necrology report, and we urge that he keep charge of that report, as usual.

In the matter of blanket insurance, as outlined by Dr. Campbell in his report, we feel that this should be reported back to the Councilors for further investigation, and reported at the next annual meeting.

CONSTITUTION AND BY-LAWS

The report of the Committee on Constitution and By-Laws was accepted, and with a few minor changes was adopted by the House of Delegates.

LEGISLATIVE COMMITTEE

At your last annual meeting, held in Portland, the following resolution was passed:

"The much discussed and many times debated bill on medical licensure is again brought to our attention. Our Legislative Committee, in conjunction with members of our association who take an active part in the legislature, we believe should have the power to have a consultation between any attorney or attorneys they shall select and any attorney or attorneys of one of the cults who tried hard at the last legislature to have certain bills passed in their favor, and who were defeated in their attempts, and have them arrive at some conclusion that would be acceptable to all. We feel that eventually they will win out, and it would be for our interest to have some one bill passed that would stop all fruitless discussion that has gone on in the past."

Acting on these instructions, your Committee on Legislation has had several meetings with the osteopaths, with their attorneys, and have drawn up a bill for a composite board. The report was accepted, and the following resolution passed:

That the committee's recommendation be accepted in principle, and that the committee be at liberty to call on any member of this association for his support at any legislative hearing.

Also, that the committee be empowered to select those members they desire to help them in this work.

RESOLUTION

Resolved, That the House of Dele-

gates express their appreciation to the members of the Kennebec County Society, who have so successfully managed the affairs of the annual meeting, to the management of the Belgrade Lakes Hotel for our entertainment, and the *Waterville Sentinel* and *Portland Evening Express* for their courtesy in supplying papers, and to all others who have co-operated for the comfort of the members of the association.

Voted, To hold the next meeting at Poland Springs, if suitable arrangements can be made; if not, in Portland.

BERTRAM L. BRYANT,

Secretary.

BUDGET.

President's expenses,	\$ 100.00
Salary of Secretary and Treasurer,	100.00
Stenographer and traveling expenses of Secretary,	400.00
Legislative Committee,	100.00
Other committees,	100.00
Councilors,	100.00
Journal,	1,000.00
Delegates to A. M. A.,	500.00
Clinics,	300.00
Medical defense,	300.00
Annual meeting,	300.00
Secretaries' meetings,	75.00
New England Council,	200.00
	<hr/>
	\$3,575.00

Dr. Snipe: Mr. President, I move that the report of the Reference Committee be accepted and their recommendations adopted.

Motion seconded by Dr. Foster.

The President: Is there any discussion?

Dr. Pratt: Mr. President, I should like to inquire if that means that we endorse the action of the delegates in leaving the matter of legislation entirely to the Legislative Committee?

Secretary Bryant: That is what it means.

Dr. Pratt: I would make one other inquiry in regard to the proposed law. As I understand it, that requires a composite board of three and three?

Secretary Bryant: It does.

Dr. Pratt: It does not seem to me a very good division, but I do not want to make any discussion about it.

The President: I agree with Dr. Pratt on that matter.

Secretary Bryant: I agree with him, also. I am frank to say that I think the committee has, up to the present time, done the best they could. They have got concession after concession, and they may possibly get more concessions before this thing comes to the House.

The President: I suppose there will be opportunity during the coming year for different county societies to express their wishes to the committee. Is there any further discussion? Are you ready for the question?

The question being called for, the report of the committee was adopted.

The President: We will now proceed to the election of a President-elect.

Dr. Snipe: I recognize, Mr. President, that the qualifications which are essential in a President-elect are attractive personality, high standing in the

medical profession, and a keen interest in organized medicine. I take great pleasure in nominating for President-elect a man who possesses all these qualities, Dr. Delmont M. Stewart, of South Paris.

Dr. Sturgis: Mr. President, I have known Dr. Stewart for over twenty years — a neighboring practitioner — and I would like to second his nomination; and, if there are no further nominations, I would move that the Secretary cast the ballot of the association for him. [Motion seconded.]

The President: Are there any further nominations from the floor? If not, it is moved and seconded that the Secretary cast the ballot of the association for Dr. D. M. Stewart, of South Paris.

The motion unanimously prevailed and the Secretary cast the ballot of the association for Dr. Stewart as President-elect for the ensuing year. [Applause.]

President Twitchell: Mr. President-elect, have you anything to say to the association?

Dr. Stewart: Mr. President, I have always considered it a great honor to be the President of this association. After the very able and pleasing manner in which the meetings have been handled for the last few days, I feel very humble and inadequate. I assure you, however, that I appreciate that there is a responsibility which goes with this work, and I shall be glad to give quite freely of my time and services so far as my feeble abilities will permit. [Applause.]

President Twitchell: I attended the

annual meeting of the New Hampshire Medical Association last year, and they had what seemed to me a very pleasant custom there, and that was, at the close of the session, to introduce the President-elect of last year, who is to be the President the next year, and ask him to close the meeting; and now, after thanking you for your courtesy at this meeting, which I have enjoyed exceedingly, I ask Dr. Gilbert to take the Chair. [Applause.]

Dr. Gilbert: Mr. Retiring President and Members of the Association: I believe that our retiring President should be congratulated for the very efficient and able manner in which he has carried on during the year, and during this session, and I only hope that the coming year I may carry on as efficiently and as well. I appreciate that we are approaching the end of the session, and it will become my duty the coming year to visit the most of your societies, or all of them. You probably will see more of me than you want to, but there is a great deal of work to be done. Sitting through the New England Council session yesterday, and attending the various meetings about, one's mind becomes somewhat confused, and it is difficult to tie down to one thing. We have all had a very interesting session here, and I think probably the time has come when we can adjourn to our meeting of next year, which probably will be at Poland Springs. I fully appreciate the honor of serving as President this year, and will do everything I possibly can. A year ago

I planned to put some time into the work of organizing a woman's auxiliary, and this year I shall probably, in visiting the county societies, try to arrange with the Secretaries and Presidents to have the ladies present, and try in some way to interest them in that field of work, bearing in mind that a medical man's life is essentially a life of sacrifice, a type of service that he cannot share with his family. He is dealing constantly with family secrets, and his life is rarely understood. Public health problems that we discuss in our conventions, matters pertaining to the health of communities, health in schools, are some problems that the women can take an active part in and thus come to realize and know what the medical man is doing. They can thus get a keener insight into the problems of the physician's life, and I think it will be a wonderful thing for them to do this. I think there is a great deal in this idea of a woman's auxiliary, and that will be one of the things I shall try to establish in Maine. I think in all our legislative problems, and problems where we must go before the public, we can much better reach the public with the aid of the ladies than by going as medical men, biased in our profession. These and many other thoughts occur to me, but I think we have reached the time when we all want to go home, and if there is no other matter to come before the meeting, a motion to adjourn is in order.

Voted to adjourn.

NOTICE

Health of Workers in Dusty Trades

The United States Public Health Service has completed a study of the health of workers in a Portland cement plant, the first of a series covering the dusty trades, according to an announcement recently made by Surgeon General H. S. Cumming. The study was undertaken to ascertain whether persons working in an atmosphere containing numerous minute particles of a calcium dust suffered any harmful effects. The investigation was conducted in one of the older, dustier plants, so that the effect of large quantities of the dust could be observed. Records of all absences from work were kept for three years, and the nature of disabling sickness was ascertained. Physical examinations were made, X-ray films taken, and the character and amounts of dust in the atmosphere of the plant were determined.

The results of this investigation indicated that the calcium dusts generated in the process of manufacturing Portland cement do not predispose workers to tuberculosis nor to pneumonia. The workers exposed to dust experienced, however, an abnormal number of attacks of diseases of the upper respiratory tract, especially colds, acute bronchitis, diseases of the pharynx and tonsils, and also influenza, or grippe. Attacks of

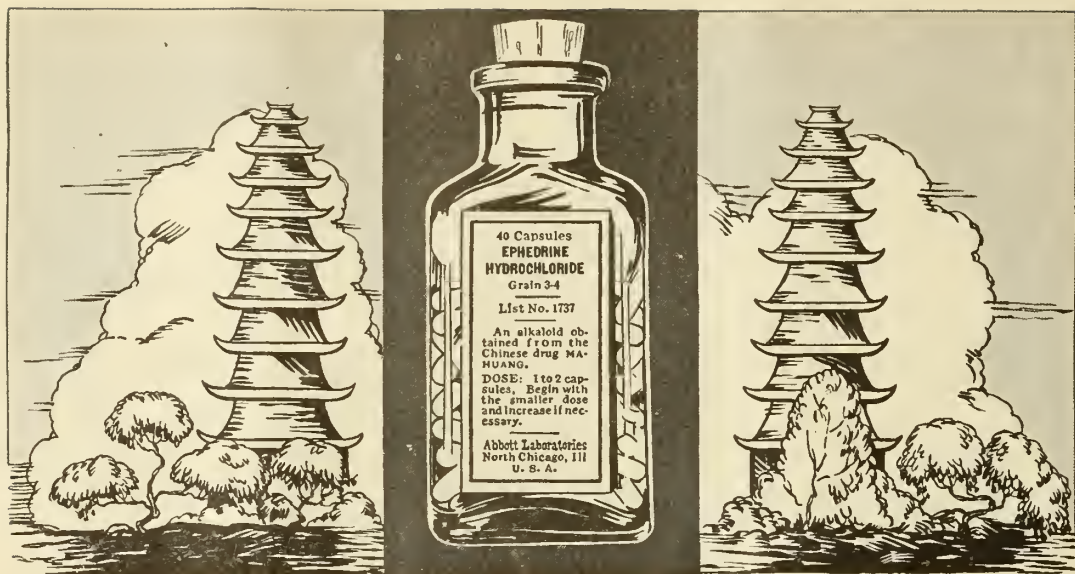
these diseases serious enough to cause absence for two consecutive working days or longer occurred among the men in the dustier departments at a rate which was about 60 per cent. above that of the men in the comparatively non-dusty departments. Limestone dust appeared to be slightly more deleterious in this respect than cement dust.

Outdoor work in all kinds of weather such as was experienced by the quarry workers appeared to predispose to diseases of the upper respiratory tract even more than did exposure to the calcium dusts. In the outdoor departments of the plant, also, the highest attack rates of rheumatism were found. The study also indicated that work in a cement dusty atmosphere may predispose to certain skin diseases such as boils, to conjunctivitis, and to deafness when cement dust in combination with ear wax forms plugs in the external ear. When the dust in the atmosphere is less than about ten million particles per cubic foot of air it is doubtful that the above-mentioned diseases and conditions would be found at greater than average frequency.

Modernization of plans and installation of ventilating systems are helping to solve the dust problem of the industry.

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No. 10

THE IMPORTANCE OF CURETTAGE PRECEDING SUPRA-VAGINAL HYSTERECTOMY

BY LINCOLN DAVIS, M. D., Boston

Dilatation and curettage of the uterus, D. & C. as it is commonly listed in the hospital operating rooms of today, has an interesting history. Dilatation of the cervical canal is an operation dating back to the early days of antiquity. Hippocrates describes sets of graduated uterine dilators made of wood, and tells how they are to be used. After several days of fumigation of the cervix to soften it, dilators of smooth, fine wood smeared with oil were successively introduced into the cervical canal. This was done for the purpose apparently of applying certain medicaments. Hippocrates also directs how to treat hysteria by dilating the cervix, first with a probe and then by the finger. Tents were also frequently used for this purpose.

The early history of the curette is more obscure. A scoop or spoon-shaped instrument was in use in the time of Hippocrates for scraping the auditory

canal. Several scoop-shaped instruments resembling the uterine curette, which might well have been used for the purpose of curetting the uterine mucosa, are pictured in the illustrations of ancient Greek and Roman instruments, under the names of specillum and spathomele. There is, however, but scanty reference in the Greek or Roman texts apparently to any such use of these instruments. The only reference which I have been able to find in the English translations on this subject, in a hasty review of the literature, is by John S. Milne, in "Surgical Instruments in Greek and Roman Times." He translates from Hippocrates as follows: "If the menses form thrombi . . . we must wind the skin of a vulture or a piece of vellum around a curette and curette the os uteri." Milne states that the word *zustra* which he translates as curette may mean strigil.

Probably the uterine sound, and pos-

*Paper read before the Annual Meeting of the Maine Medical Association.

sibly also the curette, were used for illegal purposes in producing abortion, which was so common during the later days of the Roman Empire, although the Hippocratic oath specifically forbade this practice by physicians.

Medical history is strangely silent in regard to the uterine curette from the time of the Greeks and Romans until the middle of the nineteenth century, when Recamier, of Paris, reintroduces it to the medical world for the removal of "productions, *fibreuses et fongueuses intra-uterins*." His instrument was a double-ended scoop with sharp edges, resembling a modern gallstone scoop. He reported its use in quite a series of cases of metrorrhagia with fair success. He was, as far as I can learn, the first to use the word curette, although he spoke of the procedure as abrasio, and did not use the word curettage, which has since become so universal. For many years after Recamier's time there were a host of synonyms for this procedure—curettage, curage, raelage, grattage, curetting, scraping, abrasio, auskratzung, ausschabung, etc.

The introduction of Recamier's uterine curette produced a considerable stir in the medical world at the time. Three cases of perforation of the uterus by the curette, followed by death, were soon reported. This led to the almost universal condemnation of the procedure and its burial in oblivion for a period of nearly twenty years more.

It is interesting to note that Recamier not only rediscovered the uterine curette, but also the vaginal speculum. There is little doubt but that he con-

ceived these inventions in his own mind, but, like so much that is brought out as new in the medical profession, a careful review of the literature shows that the same conception had occurred to others many years before. In the ruins of the house of the physician excavated at Pompeii beautiful examples of bivalve and trivalve vaginal specula were found and are now on exhibition at the museum at Naples. Strangely enough, the rectal speculum far antedates the vaginal in medical history, for the former is described by Susrutas in sanscrit hundreds of years before the time of Hippocrates. Hippocrates, while familiar with the bivalve and tube-shaped rectal speculum, never mentions the use of such an instrument in the vagina.

Marion Sims, in 1865, modified Recamier's curette and advocated its use for removing intrauterine fungoid granulations. About the same time the instrument was introduced into Germany by Hegar and Simon, and in England by Simpson.

The early use of the curette was entirely as a therapeutic measure for removing fungous growths of the endometrium, or the retained products of conception, or for endometritis of varying types, as well as for other real and imaginary diseases.

Following the publication of Virchow's "Cellular Pathology," in 1858, and the dissemination of knowledge as to the microscopical structure of tumors, the modern and more important use of the curette as a diagnostic measure began to be appreciated. It is, however, quite surprising to find how

often sarcoma of the body of the uterus is referred to in even fairly modern articles on curettage, and how little attention was paid to carcinoma of the body of the uterus until late in the nineteenth century.

As a matter of fact, sarcoma of the endometrium is of the rarest occurrence, and while sarcoma arising from the muscular wall of the uterus, or in myomata, is occasionally encountered, the curette is usually of little avail in revealing its presence.

It is as a diagnostic procedure that curettage of the uterus maintains its importance to-day, and particularly in the diagnosis of adenocarcinoma of the body of the uterus. The therapeutic uses of the curette are of relatively minor importance. I cannot do better than quote the words of Howard A. Kelly in his latest textbook on gynecology: "A dilatation and curettage should be done in all abnormal uterine bleedings, except in young unmarried girls. Especially is it called for in every woman past the menopause who bleeds even a little, as well as in cases of fibroid tumors, to exclude any malignant disease of the mucosa."

I would add to this, it should be done as a preliminary step in every contemplated supravaginal hysterectomy to exclude malignant disease of the endometrium. This is the point I wish to emphasize, and is the whole point of this paper. I firmly believe in its truth, and I know it needs emphasizing, for I find difficulty in convincing even some of my colleagues at the Massachu-

setts General Hospital of its importance.

It is a well-known fact that adenocarcinoma of the body of the uterus occurs in conjunction with fibromyoma. Just how often this combination is found is a moot point.

Figures have been published showing that myomata are found in twenty per cent. of cases of carcinoma of the fundus, and that carcinoma is found in from two to three per cent. of all myomatous uteri. Now if this is the case, and supravaginal hysterectomy is adopted as the routine treatment when uterine fibroids are subjected to operation, it will be found that out of one hundred such hysterectomies there will be from two to three cases in which adenocarcinoma will be found in the specimens removed.

No one at the present day would claim that supravaginal hysterectomy was a proper or adequate procedure for removal of carcinoma of the body of the uterus. Practically all surgical authorities insist on removal of the entire uterus, including the cervix. What happens when a supravaginal hysterectomy is done in a case of unsuspected adenocarcinoma of the body? If the carcinoma is small and limited to the region of the cornua, a cure may indeed result, but if more extensive, the disease will be cut across in amputating the cervix and infected material escape into the field, with most serious results as regards septic infection and metastases. If the condition is unrecognized, a carcinomatous cervical stump will

often be left behind. This is a most serious dilemma, alike unsatisfactory to treat either by operation or by radium, with a very bad prognosis. Prevention is the best treatment.

Polak, in advocating total hysterectomy for fibroid tumors in 1920, collected from the American literature two hundred fifty-six cases in which cancer occurred in the cervical stump after subtotal hysterectomy for fibroid tumors. Cases in which cancer developed within one year of hysterectomy were not included in his list, on the supposition that in such cases the disease was co-existent at the time of operation.

Cases in which there is strong clinical evidence that cancer existed at the time of supravaginal hysterectomy and was overlooked are, I believe, equally numerous. A few years ago I reviewed the statistics at the Massachusetts General Hospital over a five-year period and found eight cases of cancer of the cervical stump in which supravaginal hysterectomy for fibroid tumors had previously been performed. In five of these cases it seemed probable that there was co-existent carcinoma at the time of the original operation. The histories showed that in two cases a bloody vaginal discharge was noticed almost immediately after operation: in one case it was noted five months, in another ten months, and in another one year and eight months after operation. In four cases the original operation for fibroids was performed at the Massachusetts General Hospital, while four

others were operated on elsewhere. It is an interesting fact that of the eight cases of carcinoma of the cervical stump three occurred in unmarried women. This is quite out of line with the statistics for squamous cell carcinoma of the cervix, and adds to the presumption that these were cases of overlooked co-existent adenocarcinoma of the body of the uterus from which the disease was disseminated to the cervix.

How should the threat of carcinoma of the cervical stump after supravaginal hysterectomy for fibroids be met by the operating surgeon of to-day? Polak was one of the first to recognize the situation and proposed that total hysterectomy, rather than supravaginal hysterectomy, be performed in all cases of fibroids in which operation is indicated, except when the cervix is free from injury or disease in the nulliparous woman. Other surgeons have also adopted this attitude, which is theoretically logical and correct, if the mortality rate is not thereby elevated above the percentage of incidence of the disease itself. It is my belief that routine complete hysterectomy in the hands of the average surgeon now doing supravaginal hysterectomy for fibroids would undoubtedly elevate the mortality considerably above this point.

Other surgeons have met the situation by coring out the cervical canal either by means of the cautery or the knife, leaving the portio vaginalis practically intact. If the cautery is used for this purpose after the cervix has been amputated supravaginally,

the damage has already been done if co-existent carcinoma adjacent to the internal os is present. If the knife is used and a cone-shaped piece of tissue, including the cervical canal, is removed with the body of the uterus, as in the procedure recently advocated by F. H. Lahey, there is in my opinion grave danger during the manipulation of dislodging and setting free cancer cells, provided adenocarcinoma already exists in the uterine canal. Neither method safeguards against the subsequent development of squamous cell carcinoma of the portio vaginalis of the cervix.

Bearing in mind the frequent association of adenocarcinoma of the body of the uterus and fibromyomata, it is my firm conviction that every case in which hysterectomy is contemplated should have a careful inspection of the cervix and a preliminary curettage of the cervical and uterine canals. If the cervix appears to be normal, and if the curette, after a thorough search, brings no material of a clinically suspicious nature, supravaginal hysterectomy can then be resorted to at the same sitting with a clear conscience on the part of the operator. If well-marked adenocarcinoma of the body exists, it will, in my opinion, almost invariably be revealed clinically to the skilled operator by the curettage. A soft spot in the uterine wall from which curettefuls of soft grayish material can repeatedly be obtained is quite pathognomonic of carcinoma. It is, of course, most desirable to have a pathologist at hand to

examine microscopically any suspicious material obtained and pronounce immediately upon its nature. Pathologists, however, are reluctant to assume this responsibility unless given a few days' time in which to harden, imbed and stain the specimens.

When clinically suspicious material is obtained by curettage and the pathologist is unwilling to pronounce definitely upon it, there are two courses open to the operator; he may either proceed immediately to do a total hysterectomy at the same sitting, or he may postpone the hysterectomy for a few days until a definite pathological report on the curettings is made. It might be objected to the latter procedure that the preliminary curettage in the presence of carcinoma would be conducive to dissemination of the disease and the formation of distant metastases. While this objection certainly holds true of cancer elsewhere, it does not seem to be the case in adenocarcinoma of the body of the uterus if hysterectomy follows within a few days.

Norris, of Philadelphia, made a study of this question and found an actual slightly greater percentage of cures in cases of hysterectomy preceded by curettage than in those in which no curettage was done. In a series of fifty cases of hysterectomy for carcinoma of the body of the uterus at the Massachusetts General Hospital, which I reported three years ago, I found that twenty-two cases had preliminary curettage and twenty did not. In eight

cases hysterectomy followed the curettage immediately, being done at the same session. In thirteen cases hysterectomy was performed after an interval of a few days. The end results in the two groups of cases were not far apart. There were eight three year "cures" in the group which were curetted, and ten in those in which no curettage was done.

To recapitulate the points which I desire to emphasize:

1. Supravaginal hysterectomy for fibroid tumors is too good an operation to be given up. Under proper indications it is safe and satisfactory.

2. The incidence of adenocarcinoma of the body of the uterus associated with fibroid tumors is of sufficient importance and frequency to require its determination before resorting to supravaginal hysterectomy as a routine procedure.

The most certain means of determining the presence of adenocarcinoma complicating fibroids is by preliminary curettage.

Out of many cases illustrating the value of preliminary curettage one recent example is perhaps worth reporting briefly:

Mrs. F. S. H. Married. 62 years of age. One child, menopause eight years previous. For the last four or five years she has noticed at times a scanty brownish-red vaginal discharge, occasionally she has slight discomfort in left flank. She has been treated for colitis. Thirty years ago a urethral caruncle was removed. She has had

some indigestion and discomfort in the epigastrium. Examination showed a rather obese woman. The chest and abdomen were essentially negative. There was a moderate laceration of the perineum with rectocele. The cervix was atrophic, smooth in contour and normal in appearance. The body of the uterus could not be definitely palpated, but did not seem to be enlarged. Curettage was proposed to the patient and accepted. Under ether the uterus was found to be normal in size and no clinical evidence of malignancy was found by the curette. The curettings were submitted to the pathologist, Dr. L. W. Smith, for examination. They formed a pile on paper less than 1 c. m. in diameter and 4 m. m. in thickness. To my surprise he reported adenocarcinoma. Total abdominal hysterectomy was done a few days later and a normal appearing uterus, with appendages, removed. On section, the uterus showed a small polypoid growth 3 c. m. in length and 1 c. m. in diameter midway in the uterine canal. Directly opposite this there was a small fibromyoma of the uterine wall of 2 c. m. in diameter. Finally at the fundus there was a small nodular growth 1 by $\frac{1}{2}$ c. m. in diameter, section of which showed unmistakable adenocarcinoma just beginning to infiltrate the musculature. It was a fortunate circumstance that a portion of this small malignant tumor was obtained by the curette. If it had been missed and the polyp only obtained, no hysterectomy would have been done. It will be noticed that there was a

small fibroid tumor present in this case, which was of no clinical significance.

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*THE NEWER GYNAECOLOGY

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The specialty of gynæcology, in the course of its evolution during the past seventy-five years, has passed through two distinct eras. The first of these was medical and the second surgical. For the third, or modern era, it is difficult to find a single descriptive adjective, since the best gynæcologic practice of the present day is a judicious blending of medicine, surgery and sociology.

Three-quarters of a century ago gynæcology was primarily a medical specialty. Barring a few minor external operations and an occasional dar-

ing ovariectomy, the treatment of women's diseases consisted of the useless administration of drugs by mouth and the almost equally useless application of them to the accessible parts of the genital tract. To offset the futility of such measures there was, on the other hand, excellent supervision of the general health of patients, in some contrast to the habit of many modern practitioners, who treat the womb first and the woman second, if at all.

Then dawned the surgical era. The earlier years of this were marked by the

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epoch-making work of Sims on vesico-vaginal fistula, and the subsequent development of all the standard plastic operations. Later the introduction of asepsis led to abdominal surgery, and the pelvis, the first field invaded, long remained the favorite. With a typical swing of the pendulum, medical measures were largely abandoned. A veritable furor operandi appeared, and a certain number of enthusiastic surgeons became pelvic carpenters, skilled perhaps in following out a strictly anatomic idea, but lamentably unskilled in relieving many of the complaints of their patients. To these men, if I may paraphrase the familiar quotation, a woman was only a woman, but a retroverted uterus was an operation. It is impossible to estimate the amount of ill-judged operating which was done in this era. The brighter side of the picture is seen in an extensive development of good surgical technique.

There are, and I suppose always will be, some few practitioners whose methods are behind the times. Thus it happens that even today we encounter, on the one hand, men who place too great a reliance upon palliative measures, and on the other, those who see in their pelvic cases nothing but operative material. I am bound to say that the latter fault is more likely to be noted among general surgeons than among the specialists who limit their work to gynecology. In this paper I shall attempt to define the position taken by modern gynecologists with regard to several of the problems on which our views have radically changed in recent years.

MEDICAL ASPECTS

One of my surgical friends is fond of saying that there is no such thing as

medical gynecology. In so far as he refers to the giving of medicines for the direct treatment of pelvic conditions, I should almost agree with him, although we must not overlook the increasing importance of endocrine therapy and the limited usefulness of a few drugs, such as ergot, opium and the antispasmodics.

I should also agree to the general futility of local applications, particularly of antiseptics, to the female genital tract. In vaginitis such measures may be indicated, but vaginitis is a rare disease except in childhood and old age. Among married women in the prime of life most leucorrhœas are of endocervical origin, and such infections are deep-seated beyond the reach of any surface applications. The same may be said of the infections of Skene's glands, which complicate most cases of urethritis. The antiseptic douche, the vaginal suppository, and the various paintings and swabbings of the cervix accomplish little or nothing in the way of permanent benefit. Vaginal tamponade, with glycerin, produces a certain degree of depletion, but that effect is much better obtained, when indicated, by the use of the full vaginal pack of gauze or by the long hot douche.

If, however, my surgical friend means to say that there is no non-operative gynecology of any real value, I can only conclude that he has failed to keep abreast of modern progress. As a matter of fact, some of the most important recent therapeutic advances in our field have been along non-surgical lines.

Radiotherapy

A conspicuous example is seen in the development of radiotherapy in gynecology. For cervical cancer the use of radium and x-ray bids fair to displace

surgery altogether, giving equally good end-results, without the appalling immediate operative mortality. Radiation is a rational treatment in many cases of fibromyoma uteri, and is often the treatment of choice when exsanguination or constitutional disease would make operation hazardous. Smaller doses of x-rays, acting on the ovaries, are sometimes invaluable in stopping the so-called functional bleedings which occur most commonly at the menopause. A very interesting application of x-ray therapy is the stimulation of sluggish ovaries with minute dosage; by this means there have been accomplished remarkable cures of amenorrhœa and sterility in cases of the type which is practically hopeless with any other method of treatment.

Another sort of radiotherapy, the direct application of ultra-violet rays, promises to be a valuable method in selected cases of chronic endocervicitis. Still another sort, heat radiation by diathermy, can be employed with considerable success to clear up the old exudates of chronic pelvic inflammation.

Hydrotherapy

In the department of hydrotherapy we have the hot sitz bath, useful in acute gonorrhœa, and the vaginal douche.

As commonly practiced, douche therapy is well-nigh worthless. The cleansing douche is unnecessary in the healthy vagina and inadequate when the vagina is diseased. The medicated douche is of very limited value, since in most cases the drug in solution does not reach the seat of the trouble which it is intended to remedy. I should like to emphasize the statements just made,

since at the present time certain commercialists are endeavoring to propagate the idea that frequent douching is a necessary part of the fastidious woman's care of herself. According to these individuals, it should have as regular a place in the daily toilette as the brushing of the teeth. In point of fact, it is exactly as important as daily gastric lavage.

The hydrotherapeutic douche, on the other hand, is capable of accomplishing definite good. Of douches of this type the most important is the long hot, or depleting, douche. It consists of eight to twelve quarts of plain water at a temperature as hot as can be borne, usually between 105 and 115 degrees Fahrenheit. The effect of prolonged wet heat applied in this way is at first arterial and venous vasoconstriction, which allows passive venous congestion to disappear. Several hours of normal healthy circulation may then follow before the hydrotherapeutic benefit is lost.

"The long hot douche is among the most valuable of minor therapeutic measures in gynæcology. It has a very wide range of application, being indicated in all disorders of which chronic passive congestion is a feature. Included among these are conditions of sub-acute or chronic inflammation of any of the pelvic structures.

"As palliation, the depleting douche relieves pain, limits the spread of inflammation, and helps in the absorption of exudate. In many cases, notably those of endocervicitis and of mild salpingitis, a course of depletion may result in a permanent cure, the improved circulatory conditions allowing the tissues to regain enough of their natural

resistive powers so that they are able to overcome infection.”*

Mechanotherapy

The treatment of two of the commonest complaints presented by the gynecological patient, dysmenorrhœa and backache, has been largely transferred from the field of surgery to that of postural training and corrective exercise.

Some few cases of dysmenorrhœa, especially among married women, are the result of pathologic organic conditions in the pelvis and require surgical treatment. The great majority of vaginal cases, however, show no anatomic abnormality in the female organs, and are purely functional disturbances. The nervous instability responsible for this symptom is likely to manifest itself in other ways also, so that the syndrome of dysmenorrhœa, faulty posture, and chronic constipation is very frequent. A permanent cure in such a case is usually accomplished by postural correction and treatment of the constipation, together with careful regulation of the patient's hygiene and attention to her general health. As an adjuvant measure, I am fond of prescribing a set of special abdominal exercises intended to stabilize the pelvic circulation. Drugs are never more than month-to-month palliation, while surgery in cases of this type is exceedingly disappointing.

As to backache, it is no longer the fashion to consider it a common symptom of gynecological disease. Indeed, I know of only two pelvic conditions which give rise directly to this complaint — inflammation involving the

uterosacral ligaments, and late cancer with metastases.

The ordinary backaches of women are postural. There are three primary points of muscular incompetence—the feet, the pelvic floor, and the abdominal wall. With the muscular balance of the body thrown out of normal by deficiency at any one of these points, an excessive load is put upon the muscles of the back. The results are first muscular fatigue and relaxation, and then ligamentous strain.

In asserting that most backaches are of postural rather than intrapelvic origin, I am not unmindful of the fact that backache is a frequent concomitant of menstruation as well as of pregnancy. Even here, however, the assertion holds true, for by reason of a sore pelvis in the one case, and a heavy pelvis in the other, the patient so alters her body-balance that postural strain ensues.

One of the commonest pathologic conditions seen in adult women is relaxation of the anterior abdominal wall. This is caused by poor general hygiene, repeated pregnancies, and the improper use of corsets. Not only is such relaxation a frequent factor in backache, but it also gives rise to a syndrome of gastrointestinal symptoms—vague abdominal pain, minor digestive disorders, flatulence and chronic constipation. Both the backache and the abdominal symptoms are relieved, as a rule, by the provision of adequate support. Since the idea of restoring the average patient's own muscles through a prolonged course of gymnastics is utopian, we ordinarily fall back upon the use of artificial support. A proper corset for this purpose must lace in front, in order

*Meaker, S. R.: "The Vaginal Douche," *Journal of the American Medical Association*, Oct. 23, 1926, Vol. 87, pp. 1377-1379.

that it may be adjusted so as to lift without constricting.

Organotherapy

In the dark field of endocrinology there are now a few clear beams of light. I do not refer to *ignes fatui* which emanate from advertising pharmaceutical houses, but rather to recent contributions of certain leading physiologists and chemists.

It is now possible to identify with reasonable accuracy the three main foci of glandular failure in the female—the thyroid, the pituitary and the ovary. While we cannot properly think of any gland as working unto itself alone, it appears that a monoglandular diagnosis of the primary focus of failure and intensive monoglandular treatment of that focus give better results than any attempt at pluriglandular therapy.

In gynæcologic practice we encounter two types of endocrine defects. The first type is seen in patients in whom a transient phase of glandular failure at puberty has led to a greater or lesser degree of underdevelopment on the part of the pelvic organs. The extreme of such hypoplasia is infantilism, which is rare; much more frequently one sees juvenilism, the persistence into adult life of prepubertal conditions. Such developmental arrests are due less commonly to thyroid underfunction, and more commonly to underfunction of the anterior lobe of the pituitary. Often the faulty gland recovers, so that in adult life the patient does not suffer from any lack of internal secretion. The stigmata of underfunction at a critical period remain, however, in the form of imperfectly developed generative organs. The treatment of such conditions after the age of twenty years

is almost hopeless, since the development impulse is then no longer present. On the other hand, the prognosis is excellent if such a case is accurately diagnosed and vigorously treated at the age of seventeen or eighteen. So-called delayed puberty should never be neglected or treated expectantly, as it may portend hypoplasia and inevitable sterility.

The other type of endocrinopathy seen in gynæcologic practice is a post-pubertal failure on the part of some gland, the pelvic organs having attained full development at puberty. Any of the major glands may at any time become underactive, and a variety of pelvic symptoms may result.

A familiar clinical picture is presented by the woman who is overweight, scanty or irregular in her menstruation, and sterile. Until a few years ago the obesity was generally believed to be the direct and primary cause of the other two symptoms in this syndrome. Much irrational procedure was based upon this belief; for example, it was often assumed that, if a man was possessed of no children and of a fat wife, he himself was *ipso facto* demonstrated to be guiltless of infertility. In recent years it has become recognized that obesity, amenorrhœa, and sterility bear no causative relationship to one another, but are simultaneous results of a common underlying cause. The prevalent opinion today assumes endocrine failure as that cause, and the ovary as the most frequent focus of failure. Such assumption is often erroneous, for it can be demonstrated that cases of the sort which we are discussing fall into two distinct groups, the non-endocrine and the endocrine. In the endocrine group the focus of failure is located six times in the anterior lobe of the pitui-

tary and three times in the thyroid to once in the internally secreting portion of the ovary. The non-endocrine cases show metabolic faults of extrinsic origin, resulting from improper balance in the diet and lack of enough exercise to insure assimilation.

While a complete ovarian failure, such as results from the surgical removal of both ovaries, leads to amenorrhœa, a frequent result of the milder degrees of ovarian failure is excessive flowing. In this way we now explain the so-called functional hemorrhages of the menopause, as well as the much less common puberty bleedings. In these and all other cases where ovarian therapy is indicated, far better results are obtained with the newly discovered follicular hormone than with any of the older ovarian preparations.

SURGICAL ASPECTS

Surgery remains the treatment of choice in a large number of pelvic conditions. The modern gynecologist is learning better how to operate, and, what is more important, he is learning when and when not to operate. In consequence, there is, in general, less pelvic surgery done, but of that which is done the end-results are increasingly satisfactory. As illustrations of this let me offer three procedures on which our present-day views differ radically from the opinions held twenty years ago.

Dilatation and Curettage

If a medical student of my time had been asked the indications for dilatation and curettage, he would have replied unhesitatingly chronic endometritis, dysmenorrhœa, sterility and miscarriage. Such an answer from one of my students today would receive a

mark of less than twenty-five per cent.

It is now recognized that chronic endometritis does not exist as a clinical entity except in senile cases, and that local treatment of the endometrium is but rarely indicated. Most of the leucorrhœas formerly supposed to be of endometrial origin are now understood to come from the endocervix, where the infection is too deep-seated for removal by the eurette.

In dysmenorrhœa dilatation occasionally results in some temporary benefit, not because it removes a hypothetical factor of obstruction, but because of an obscure reflex readjustment of nervous balance. Curettage is never indicated for dysmenorrhœa unless definite endometrial pathology, such as polypi, be present.

As to sterility, there is no causative factor for which dilatation and curettage is rational treatment. It is impossible to condemn too strongly the hasty performance of this operation in sterility cases. The last five patients who consulted me for barrenness had all been previously curetted. On careful study the causative factors proved to be azoöspemia in two cases, tubal occlusion in two cases, and in one case defective ovulation. I have often wondered what defense could be offered if a malpractice suit were brought by such a patient.

Curettage has been for many years a standard procedure in miscarriage. It is still practiced by general surgeons, but among gynecologists there is at present a conspicuous tendency to discard it in the treatment of such cases. From the clinical point of view there are four types of accomplished miscarriage: the so-called complete miscarriage, common in the first three

months of pregnancy, in which only a few decidual shreds are left in the uterus, the incomplete miscarriage with saprophytic infection, the incomplete miscarriage with pyogenic infection, and the miscarriage complicated by serious bleeding. In complete miscarriage curettement is obviously unnecessary, as much so as it is in the full-term post-partum condition. In cases complicated by serious bleeding invasion of the uterus is imperative, and whether the curette or the finger is used makes little difference. In the other two types of cases, incomplete miscarriages with infection, the uterus can be emptied of its retained products of conception by the use of ergot and glycerin vaginal packs just as efficaciously as by the employment of the curette. The only possible objection to such non-operative treatment is that convalescence is prolonged a day or two. Against this may be offset the definite advantages that the patient is spared the ordeal of anaesthesia and operation, and that there is no risk, as there undeniably is with operation, of opening new lymphatic channels of absorption and causing an extension of the infection.

The gynæcologists of Philadelphia say that there is now only one place for the curette, and that that is the Schnyl-kill river. Thus do they emphasize by hyperbole the increasingly prevalent modern view. In point of fact, curettement remains a useful procedure for a certain few definite purposes. It enables us to obtain endometrial tissue for pathological diagnosis. Another diagnostic aid is afforded by light curettage, which aims to explore rather than to remove the endometrium, the instrument being, as it were, an exten-

sion of the examining finger. Polypi and small submucous fibroids are readily removed by the curette. In senile endometritis curettement is an operation comparable to the drainage of septic areas elsewhere. The functional bleedings are not due to endometrial pathology, and their rational treatment demands that attention be directed to the ovaries. Occasionally, however, the radical ablation of the endometrium with the curette offers a useful means of checking such hemorrhages temporarily; it is, in effect, an endohysterectomy, but not a mutilating operation, since the endometrium ultimately regenerates.

Operations for Retrodisplacement

The present views on retrodisplacement of the uterus typify the reversal of thought characterizing the development of modern gynæcology. Fifty years ago all retrodisplacements were regarded as pathological and potentially productive of a great variety of symptoms, local and remote. This view is still held by a few physicians and by the majority of patients, to whom a "tipped womb" appears a condition of the gravest significance. The modern gynæcologists, on the other hand, recognize that twenty women out of every hundred have some degree of retrodisplacement, and that of the twenty not more than one experience any symptoms or require any treatment on that account.

The accepted classical symptoms of retrodisplacement — backache, bearing-down pain, excessive flowing, leucorrhœa, constipation, sterility and miscarriage—are, as a matter of fact, one and all the classical symptoms of other conditions. When retrodisplacement is

complicated by other conditions, as, for example, pelvic inflammation, these symptoms are present. The uncomplicated retrodisplacement, on the other hand, does not produce any symptoms, and in my opinion never calls for treatment on its own account.

The practical importance of the uncomplicated retrodisplacement lies in the fact that it may in a comparatively small number of cases become the direct cause of complications, examples of which are prolapse of the ovary and descent of the uterus without a doubt, and chronic passive congestion of the uterine in all probability. Until such complications develop, retrodisplacement requires nothing more than observation; when they have developed, it then becomes a question whether the correction of the malposition is necessary in addition to the treatment of the complications.

The great majority of suspension and fixation operations, of which so great a number have been devised, are unnecessary in the beginning and unsatisfactory in the end. In no case should an operation for retrodisplacement be undertaken with the hope of relieving symptoms presumed to be due to that condition, unless a preliminary trial of correction by manipulation and retention by pessary proves clearly the relation of cause and effect between the position of the womb and the symptoms in question. If this simple therapeutic test is regularly carried out, operations for retrodisplacement will become comparatively rare.

Surgery of Pelvic Inflammation

In the acute stage of pelvic inflammatory disease it is, of course, generally

agreed that abdominal operations are inadvisable. I should like to emphasize the value in such cases of another procedure — posterior colpotomy and drainage through the pouch of Douglas. Even though frank pus is not present, this little operation always has a favorable influence on the course of the disease. Abundant serous drainage is established, the result being depletion, the prevention of adhesions, and limitation of the spread of inflammation. In many cases later mutilating operations are thus avoided.

In the operative treatment of chronic pelvic inflammation we have two schools of practice, the conservative and the radical. The latter school has of late years gained more and more adherents. There is really no such clinical entity as salpingitis, at least so far as the gonorrhœal pelvis is concerned, for in all such cases the trouble extends to the ovaries, the uterine, the pelvic peritoneum, and the cellular tissue of the broad ligaments. Clearly, then, the operation of salpingectomy alone can rarely be expected to give relief of symptoms. My own view is that only the more severe and obstinate cases of chronic pelvic inflammation require surgical treatment, but that in those cases the operation should be a hysterectomy with bilateral removal of the adnexa. Whether or not one ovary may be left is a matter for consideration in some cases, depending on the age of the patient and the condition of the ovary. I should rather pluck both out than leave one to offend. Except for an effort to avoid total castration, attempts at conservatism are decidedly poor business, since the organs conserved are liabilities and not assets to their possessors.

SOCIOLOGICAL ASPECTS

It has been said facetiously that there are three groups of men who make their livings from the misfortunes of women — professional vice crusaders, the procurers of prostitutes and gynæcologists. This quip has one real point, in that it suggests a relationship between gynæcology and the social problems of the day. In fact, with the exception of psychiatry, there is probably no field of practice in which we have greater opportunity and greater need to consider the social and economic aspects of our cases.

Venereal Disease

The problem of controlling venereal disease requires an approach of this sort. Especially would I stress the importance of social management in the treatment of chronic gonorrhœa. There could be no greater absurdity than an attempt to clear up this infection in one member of a pair, taking no account of the fact that he or she will be systematically and regularly reinfected. Under favorable conditions of bodily resistance, gonorrhœa tends to be a self-limited disease. This is well shown by the acute infections in the female, which recover best under general supportive measures and without local treatment. In the chronic cases, mixed infections may require local eradication by knife or cautery, but even in these cases the gonococcus tends to die out. If, however, the organism is constantly passed from one individual to another, its virulence is maintained and the disease continues indefinitely.

Birth Control

The subject of contraception is one

of considerable social and economic importance. It is not the duty of the gynæcologist to involve himself in the legal or moral phases of this question. The medical aspect, however, is one which cannot be ignored, since people always have practiced and always will practice contraception, whether it be legalized or not. We should have a clear idea of both the relative efficiency and the potential harmfulness of the various methods employed. One distinguished gynæcologist, Dickinson, has already turned his attention to this matter, and in time undoubtedly other men of similar professional standing will lend their aid to clarify a problem of which the management has too often been appropriated by charlatans and cranks.

Sex Hygiene

It is unfortunate that the matter of sex hygiene has so little engaged the attention of reputable physicians. The prevalence of errors in this department of hygiene is appalling; they are said to affect no less than fifty per cent. of American marriages. The most serious results often follow, not only interfering with the physical and mental well-being of individuals, but also leading ultimately to social catastrophes, such as domestic infelicity and divorce.

The commonest error is the habitual performance of coitus without orgasm on the part of the wife. This produces effects of two sorts, local and general. The local result is first of all chronic passive congestion of the pelvic organs, predisposing secondarily to low-grade inflammatory and degenerative changes. The general results are nervous and mental symptoms, sometimes severe enough to make life miserable.

I shall not attempt to say where lies the responsibility for the education of the laity in this important matter. I do say, however, that the physician, and in particular the gynaecologist, who is unable to recognize this factor in his cases and to give appropriate advice for its correction, is bound often to misdirect his efforts and is overlooking many chances of accomplishing brilliant cures.

Gynaecological Economics

In the intelligent planning of gynaecological treatment there is often considerable scope for economic judgment. Take, for example, a case of prolapsus uteri which might be retained by pessary. In deciding between palliation and operation we must consider four factors: (1) the degree of relief to be derived from operation; (2) the degree of relief to be obtained from palliation; (3) the patient's expectancy of life; and (4) the cost of operation, reckoned in terms of money, time, trouble and risk. With these factors we can almost evolve a mathematical formula: if $(1-2) \times 3$ is greater than 4, then operate; if less than 4, then palliation is better. A fifth factor, the likelihood of further childbearing, enters into the problem in premenopausal cases. While the mathematical concept is perhaps a little figurative, my point is that the best results are obtained for each individual patient only by a broad consideration of every aspect of her situation.

Sterility

Since one marriage in every ten is childless, there are in this country more than two million cases of sterility. Of this fact the economic importance to the nation is obvious. As to its social im-

portance, we may safely say that at least one-half of the two million couples experience more or less profound disturbance of their entire lives by reason of their barrenness.

It happens that during the past fifteen years there has been on the part of the medical profession a great awakening of interest in the problem of sterility. This originates, perhaps, from three noteworthy advances. Hühner's work on postcoital examination demonstrates the true extent of male responsibility, the essential mechanism of insemination, and the effect on spermatozoa of hostile endocervical secretions. Transuterine gas insufflation and the injection of lipiodol make it possible to evaluate with fair accuracy the tubal factor. A better understanding of vital functions allows us to estimate the fertility of the sex cells and to recognize depressing constitutional states. The result of all this progress is a greatly increased knowledge of the causes of sterility, with consequent improvement in the means of investigation by which they may be identified and in the methods of treatment by which they may be corrected.

Our larger knowledge of etiology includes two outstanding facts. First, the male is at fault in about one-half of cases. Second, in about one-third of cases, both male and female, the trouble is not any abnormality of the generative organs, but is some constitutional state which lowers the fertility of the sex cells. It might be said, therefore, that sterility is no longer primarily a gynaecological problem, since only one-third of all cases are the result of definite abnormalities in the female pelvic organs.

The investigation of sterility prob-

lems must necessarily be elaborate and painstaking business, if every one of the forty or more etiologic possibilities is to be identified or ruled out. We have organized at the Evans Memorial a group study, in which the gynecologist, the urologist, the internist and the endocrinologist co-operate. By means of a systematic routine, which it requires a full week to carry out, we feel that the causative factor or factors can be accurately determined. No briefer or less elaborate method of investigation can be relied upon to give a complete

diagnostic answer to these complicated problems.

The treatment of sterility is in every case the treatment of the causative condition. With a better understanding of causes, and a more accurate method of identifying them, it becomes increasingly easy to direct treatment toward the proper end. Many of the traditional therapeutic measures have been discarded, and certain new ones have been devised. While achievements in this field are as yet far from being all that we would desire, noteworthy progress has been made and still continues.

*TRAUMATIC BILE CYST

By A. H. McQUILLAN, Waterville, Me.

The subject of traumatic bile cyst is one of extreme interest because of its rarity. This case is of especial interest, not only because the patient made a complete recovery, but because it teaches a lesson in the handling of traumatic conditions of the abdomen.

To the best of my knowledge there are only two references to bile cysts of the liver in the literature, one¹ of which apparently originated from an injury and contained about 9 quarts of fluid, not specified as bile, while the other² was a large bile cyst of the liver with no mention of injury as the etiologic agent.

This case deals with the all too frequent type of injury, namely an automobile accident.

An American white schoolboy, aged 9, entered the emergency ward of the Sisters' Hospital, Waterville, Maine, at 4.00 P. M., June 25, 1927, with the

history of having just been run over by a Ford sedan. Witnesses of the accident stated that the boy was coasting across a street crossing on a "scooter" and was hit by an automobile, which knocked him down and then ran over his back. While on his way to the hospital his parents said he vomited approximately one ounce of bright red blood.

Examination, on entrance, showed him to be in acute traumatic shock. The mucous membranes were pale, there was a beady perspiration on his body, a small abrasion of his lower lip, pulse 80 and just barely perceptible at the radials, respirations 58, blood pressure 94/40, and a few multiple contused abrasions over his body. Chest symmetrical, right lung clear, left lung showed showers of fine moist rales in lower lobe most marked in the axilla. Heart (rate 80) sounds slightly muffled,

*Read before the Annual Meeting of the Maine Medical Association.

otherwise negative. Abdomen markedly distended and tympanitic, with no signs of shifting dullness, exquisitely tender throughout. Reflexes were sluggish.

The patient was immediately conveyed to the X-ray room, and the suspicion of a hugely dilated stomach confirmed. He was also found to have a fracture of the seventh left rib in the mid axillary line. His stomach was immediately washed out with salt solution and a small fresh clot removed. There was immediate improvement of the clinical condition. The patient was put to bed and treated for his shock. There was no recurrence of the dilatation, but there was a persistent vomiting for three days, which gradually subsided, during which time the vomitus was positive for occult blood. Red blood cells were also present in the urine for two days, but repeated tests of occult blood in the stools were negative.

The next fourteen days in the hospital were uneventful. The temperature, pulse and respirations, and urine were normal. A gradual return to regular diet was attempted, because the patient's general condition was seemingly improving. On the sixteenth day, however, acetone suddenly appeared in the urine and a slight icteric tint in the scleræ was noted. There was some vomiting and a recurrence of pain in the epigastrium. The next two days were anxious ones, as a mass appeared in the epigastrium which seemed to be connected with the left lobe of the liver and because of a drop in the red blood count and hæmaglobin and an increase in the white blood count, his condition was considered serious. I was fortunate in having the services of E. H. Risley as a surgical consultant in this

case. We made a provisional diagnosis of ruptured liver with the formation of a blood cyst, no free fluid being demonstrated. We considered it advisable to explore the patient and this was done on the twentieth day after the injury.

Operation. Under ether anaesthesia a $3\frac{1}{2}$ inch right upper rectus muscle-splitting incision was made over the tumor. Peritoneum opened on bile stained omentum, but no excess of free fluid was encountered. There were many omental adhesions found about the upper abdomen. The liver edge was developed and was found to be swollen and tense, with a mass beneath and to the left. This mass, the size of a grapefruit, was found to lie beneath and within the left lobe of the liver. It was covered only by liver capsule, and on examining it with the finger it was ruptured and found to contain fresh bile and no blood. The rent in the liver substance was some $2\frac{1}{2}$ inches into the gland. The patient's condition suddenly became critical and two cigarette drains were inserted, one to the cavity of the cyst, the other to the lesser curvature of the stomach, through a stab wound on the left side. The incision was closed in layers and the patient sent back to the ward and treated for surgical shock. Time, 55 minutes.

On the second day post-operatively the temperature reached 102 and in less than a week had returned to normal, where it stayed throughout the remainder of hospitalization. There was a little post-operative bile drainage and for this reason the tubes were allowed to remain in for twelve days, the tube to the cavity of the cyst being the last removed. The incision healed per primum and the stab wound healed on the nineteenth day, and the patient was

discharged on the twenty-second day post-operatively.

On discharge, the chest was negative to physical and roentgological examinations. There was no stasis to a bismuth meal. The blood count returned to nearly normal, there remaining only a slight secondary anaemia and the urine was normal. The blood studies were interesting in showing the progression of a secondary anaemia with an accompanying leucocytosis of 24,000, 85% of which were polymorphonuclear leucocytes the day before operation, and then the subsequent return to normal at discharge of 4,440,000 red blood count, 85% haemoglobin, and 8,200 white cells with only 77% polys.

The patient was followed for six months, and at no time was there the slightest indication of a return of any untoward symptoms. He continually gained weight, and examination this month shows only the healed abdominal wounds as evidences that he had any injury.

Comment. From the above case it is evident that it is quite impossible to state that there is any typical examination which characterizes the presence of a bile cyst, but the condition should be considered as possible in any patient receiving a crushing injury of the abdomen.

From the history it would seem that the delayed appearance of the tumor would be more in keeping with the formation of a bile rather than an haematogenous cyst. A slow ooze of blood would tend to clot and thus repair would take place. The appearance of jaundice would mean only the presence of some obstructive lesion to the passage of bile from the liver to the duodenum.

Mention should be made of the value of the X-ray in any abdominal condition showing distention or obstruction. In this particular case the stomach must have been dilated to capacity, for it occupied the entire abdomen, and I really believe had it not been evacuated it certainly would have ruptured. This condition should always be thought of in any crushing injury of the abdomen. Its appearance is almost instantaneous and is usually diagnosed, and in case of any doubt a wet plate will be of extreme aid.

Summary. A case of traumatic bile cyst of the liver in a boy aged nine years is presented, with an account of an analysis of the findings.

¹ Coates, B. O. "A Large Cyst of the Liver," *Cleveland Medical Journal*, 1902, I, 325-328.

² Doran, A. H. G. "Large Bile Cyst of the Liver," *British Medical Journal*, London, 1903, II, 1151.

COUNTY NEWS AND NOTES

Aroostook County Medical Society

The semi-annual meeting of the Aroostook County Medical Society was held at the courthouse, Caribou, October 9, 1928.

The following members were present:

Drs. E. C. Bates, F. E. Bennett, Storer Boone, Sherman Boone, F. O. Blossom, W. G. Chamberlain, T. S. Dickison, W. B. Gibson, F. L. Gregory, H. F. Kalloch, H. C. Kimball, F. W. Mitchell, J. G. Potter, A. L. Sawyer and W. E. Sineock.

The following visitors were present: Two nurses from Cary Memorial Hospital, Caribou; five nurses from the Aroostook Hospital, Houlton; Miss Margaret Herrick, of the Branch Laboratory, State Department of Health; Dr. B. F. Porter, County Health Officer, and Dr. C. F. Kendall, of Augusta.

The meeting was called to order by the Secretary, the President and Vice President being absent. Dr. Chamberlain was elected temporary chairman. The members were very much pleased to have Dr. Chamberlain with them again.

The minutes of the last meeting were read and voted approved.

It was voted to pay outstanding bills and expenses for this meeting, and Secretary's expenses at meeting of officers and Council at Augusta (\$16.94).

The applications of Dr. W. B. Somerville, Dr. Richard Savage and Dr. J. Wilfred Parent were presented, but as none of the applicants were in attendance, their applications were laid on the table until the next session.

A report of the meeting of the officers, Council and County Secretaries, held at Augusta, September 18th, was given by the Secretary.

As Dr. Adam P. Leighton was unable to be present, Dr. Mitchell continued the program with a paper on "The Basic Science Law." After discussion by the members, it was voted that the Aroostook County Society go on record as approving the basic science law as explained by Dr. Mitchell.

After an explanation of the advan-

tages to be gained by having a full-time Secretary for the Maine Medical Association, it was moved and voted to adopt this plan.

It was also voted that the Secretary should write Dr. Gilbert, of Portland, and inquire as to the ways and means of organizing a woman's auxiliary. Consensus of opinion was that the auxiliary would be an aid to the county society.

Dr. Kendall gave an interesting talk on the work of the State Laboratory and of the need of making use of same within a reasonable limit, and especially in reference to the testing for undulant fever—that samples of blood be forwarded in all suspicious cases to the State Laboratory for any continuous fever not explained in the usual way. The discussion of this interesting paper was carried on by Drs. Boone, Gregory, Dickison and Bennett. Questions asked by members.

Dr. Storer Boone gave a very detailed and interesting account of a case of undulant fever which he recently had in his practice.

The meeting was then adjourned to the Vaughan House for dinner.

At 2.00 P. M., the meeting was called to order by the Vice President, Dr. Storer Boone.

It was voted that Dr. F. E. Bennett be elected to serve as a member on the auxiliary committee on legislation to represent the Aroostook County Society, in conformity with Chap. 11, Sec. 10, Constitution and By-Laws of Maine Medical Association.

Miss Herrick, of the Branch Laboratory, State Department of Health, then read a very fine paper on laboratory findings in typhoid cases which had come under her observation from January 1, 1928, to October 1. Miss Herrick's paper showed great attention to detail and technique, and also showed that the young lady is not only interested in her work, but is able to draw conclusions from the results of her efforts.

Dr. Sincok then read a paper describing part of his trip around the world, which included Port Said, through the Suez Canal, and ancient Egypt. He gave a detailed description of the City of Cairo, and the Sphinx, the tombs of the kings, the temples of Luxor, and his trip down the Nile to Alexandria. It was a very interesting paper and much appreciated by the members.

There being no further business, the meeting was adjourned, as many wished to take this opportunity to visit the Cary Memorial Hospital.

The next meeting will be held in Houlton, the second Tuesday in June.

Respectfully submitted,

JOHN G. POTTER,
Secretary.

Franklin County Medical Society

The Franklin County Medical Society held its annual meeting on September 7th, at the Exchange Hotel, Farmington.

The following officers were elected for 1929:

President—John Moulton, Rangeley.

Vice-President—Clarence J. Dunlap, Kingfield.

Secretary and Treasurer—G. L. Pratt, Farmington.

Delegate to the Maine Medical Association—T. E. Makepeace, Farmington; alternate delegate, A. I. York, Wilton.

Censor for three years—J. W. Nichols, Farmington.

Member of Auxiliary Committee on Legislation—G. L. Pratt, Farmington.

The principal business of the meeting was a discussion of proposed legislation by Dr. F. Y. Gilbert, of Portland; Dr. L. P. Gerrish, of Lisbon Falls; Dr. E. W. Gehring, of Portland; Dr. H. F. Twitchell, of Portland; Dr. J. G. Towne, of Waterville; Dr. G. E. Young, of Skowhegan, and others.

The following resolution was adopted: That we disapprove of the bill discussed by the Legislation Committee and the House of Delegates at Belgrade, but that we approve, in principle, a basic science law.

G. L. PRATT,
Secretary.

Kennebec County Medical Association

The quarterly meeting of the Kennebec County Medical Association was held at the Augusta House, Augusta, Thursday, September 20, 1928.

This meeting was held in conjunction with the state officials and the county secretaries of the Maine Medical Association.

Dinner was served at 7.00 P. M.

A short business meeting followed,

which was presided over by the President of the Association, Dr. Richard H. Stubbs, of Augusta.

Dr. William J. Young, of the National Soldiers' Home of Togus, was admitted to membership.

It was voted that the Kennebec County Medical Association go on record as disapproving the action taken by the Maine Medical Association at its annual meeting in June, 1928, at Belgrade, putting itself on record as favoring the organization of a composite medical registering and examining board.

It was voted that the Kennebec Medical Association go on record as favoring the passage of basic science laws.

The speakers of the evening were Dr. E. D. Merrill, of Dover-Foxcroft, who spoke on "Public Health in Maine"; Dr. J. D. Phillips, of Southwest Harbor; Dr. B. L. Bryant, of Bangor, Secretary of the Maine Medical Association; Dr. D. M. Stewart, of South Paris, President-Elect of the Maine Medical Association; Dr. L. P. Gerrish, of Portland, Member of the New England Medical Council; Dr. John Sturgis, of Auburn, chairman of the Councilors of the Maine Medical Association; Dr. Frank Y. Gilbert, of Portland, President of the Maine Medical Association; Dr. Adam Leighton, of Portland, Secretary of the Maine Registration Board, and Dr. Fred W. Mitchell, of Houlton, a member of the State Senate.

This meeting was followed by talks pertaining to medical legislature, which are important to the Association.

The following members of the Kennebec County Medical Association and guests were present: Drs. E. W. Gehring, Frank Y. Gilbert, Adam P. Leighton, George P. Cummings, of Portland; A. K. Smith, B. L. Bryant, H. C. Scribner, of Bangor; F. H. Freeman, of Pittsfield; L. G. Bunker, R. L. Reynolds, E. H. Risley, J. P. Piper, J. P. Goodrich, Arthur H. McQuillan, of Waterville; D. M. Stewart, of South Paris; John Sturgis, W. G. Renwick, of Auburn; S. S. Mullin, W. E. Kershner, of Bath; Wm. E. Preble, of Boston; R. W. Bicknell, of Winthrop; S. W. Staples of Norway; G. L. Pratt, T. E. Makepeace, of Farmington; H. E. Williams, of Mount Vernon; Henry Sprince, of Lewiston; John G. Potter, Fred Wm. Mitchell, of Houlton; Delmont Merrill, of Dover-Foxcroft; L. P. Gerrish, of Lisbon Falls; C. M. Thomas, of Brewer; Geo. Young, of Skowhegan; J. D. Phillips, of Southwest Harbor; R. H. Stubbs, V. T. Lathbury, G. R. Campbell, G. A. Coombs, C. F. Kendall, Wm. O'Connor, F. R. Carter, Oliver W. Turner, Louis W. Fallon and Lewis L. Mann, of Augusta.

Respectfully submitted,

F. R. CARTER, M. D.,

Secretary.

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*ENDOSCOPIC DIAGNOSIS

By FREDERICK T. HILL, M. D., F. A. C. S., Waterville, Maine

In these days any case with symptoms referable to the air, or food passages, not clearly explained and understood, should have the benefit of endoscopic examination. In no other way can a diagnosis be arrived at so accurately as by actual visual examination of the parts in question. Because of the relative infrequency with which this method of examination is resorted to, one is bound to conclude that its value is not as well appreciated by the average physician as it should be. The necessity for endoscopy in cases of foreign bodies in either the air or food passages is pretty generally recognized, although too often this is apt to be utilized only after needless and possibly dangerous delay, during which futile and sometimes ill-advised efforts to remedy the situation are employed. With the idea of illustrating the importance of endoscopy as a routine aid in diagnosis, rather than as an emergency measure of last resort, a few cases have been selected for presentation this morning.

This is not work for a one-man team.

Success demands the intelligent co-operation of at least three. Besides the endoscopist, there must be a roentgenologist and an internist, both experienced in this work, in order to achieve good diagnoses. And should the findings of these fail to agree, the endoscopist had better halt proceedings and take account of stock. Clinical findings should all mean something, and when their explanation does not coincide, there is a mistake somewhere, which it is well to discover.

Case No. 1. Baby, aged 18 months. Choked while eating a peeled apple, one week before seen. Coughing and difficulty in breathing since. Temperature 103. X-ray report showed "obstruction from non-opaque foreign body in right main bronchus. Heart displaced to right. Atelectasis of right lung." The internist, Dr. Piper, reported "breath sounds diminished over left lung." Without anaesthesia a rapid bronchoscopy was done and considerable flaky material was aspirated from the right bronchus. No foreign body found.

*Read before the Annual Meeting of the Maine Medical Association.

Child seemed to breath easier and temperature returned to normal. Subsequent X-ray and fluoroscopy, however, showed heart still on right, and left diaphragm not moving—an obstructive emphysema on the left. Second bronchoscopy performed and similar flaky material, but no foreign body, removed from left bronchus. Following this both lungs were found functioning by fluoroscopy and heart returned to normal position. Breathing, however, was difficult and temperature elevated to 102. There was some subglottic œdema from the two bronchoscopies so near together. It seemed that tracheotomy might be required, but a subsequent laryngoscopy, with aspiration of what appeared to be a membrane from the trachea, relieved the situation, and she made an uneventful recovery. Co-ordinating the findings of the internist and the X-ray at the start would have focused our attention on the left bronchus and obviated the necessity of the second bronchoscopy. Incidentally the aspiration of organic matter causes a most serious condition, producing a severe reaction in the bronchial mucosa known as a "vegetal bronchitis."

Those baffling cases which present symptoms of obstruction somewhere along the œsophagus usually demand endoscopic examination in order to finally arrive at a diagnosis. This should always be preceded by careful X-ray studies, expertly and intelligently carried out. Foreign bodies impacted in the œsophagus are most frequently arrested at the upper end behind the cricoid cartilage, where there is a normal physiological narrowing caused by the fan-shaped crico-pharyngeus muscle. It might be well to digress just a minute to warn against any blind attempts at

removal or pushing of such impacted bodies downward. These are most dangerous procedures. The posterior wall of the œsophagus at this point is very weak and the anatomy is such that if a rigid instrument is forced downward here by untrained hands, probably the one place that it will not go is the œsophagus. Instead, it is apt to perforate and go down the mediastinum with fatal results. Endoscopic removal under direct vision is the only safe course to pursue. Non-opaque foreign bodies cause considerable difficulty in localization by means of X-ray, although to-day, with the ingestion of lipiodol or bismuth salts, these may usually be outlined. Sometimes, however, the foreign body will only be discovered by endoscopy.

Case No. 2. Male, aged 43. Unable to swallow for four weeks. Pain radiating to scapula. Loss of forty pounds in weight. Family history of tuberculosis. Teeth all extracted under ether two months before. X-rays negative, no foreign body seen and chest normal. Indirect examination showed fluid in pyriform sinuses, Jackson's sign of œsophageal obstruction. Endoscopy showed a large lobster bone impacted in the œsophagus at the crico-pharyngeus. Patient did not remember swallowing this, but had been on a "spree" just four weeks before. The lack of teeth and prohibition booze were responsible.

Case No. 3. Girl, aged 3½. Unable to take more than liquid food for seven days. Parents think she may have swallowed a button. X-rays negative. Jackson's sign positive. Endoscopy revealed a large button, about one inch in diameter, in the crico-pharyngeal region. Easily removed.

Case No. 4. Shows diverticulum at

upper portion of œsophagus in a male, aged 60. Regurgitation of food for several years. Will raise that eaten at beginning of meal several hours after eating.

Case No. 5. Female, aged 47. Difficulty in swallowing for seven months. Twenty-five pounds loss of weight. Regurgitation of food. Question of malignancy. X-ray showed a dilatation of the lower œsophagus and obstruction at the hiatus. (Esophagoscopy revealed a twist of the œsophagus plus a small stricture, easily dilated. Condition relieved by subsequent bougies.

Case No. 6. Female, aged 53. Difficulty in swallowing for ten years. Vomiting for six weeks. Nothing retained for two weeks. Indirect examination negative. X-ray showed lower portion of œsophagus dilated and sagged downward with almost complete obstruction, just a small line of barium passing into stomach. (Esophagoscopy revealed a small web behind the cricoid on the left, almost obliterating left pyriform sinus, which was easily evulsed. Lower down the œsophagus was greatly dilated and full of foul-smelling fluid. The opening into the stomach was found considerably above the pouching, and was very narrow, and with a twist. Dilated with recovery.

Case No. 7. Female, aged 54. Stomach trouble for past twenty-five years following grippe. Almost impossible to swallow for past eight weeks, taking only liquids and in small amounts. Very weak and emaciated. Blood pressure 112/80. Indirect examination showed Jackson's sign negative. X-ray and fluoroscopy showed a fusiform narrowing to almost complete obstruction of the œsophagus about four inches above cardia. (Esophago-

scopy revealed an olive stone at this point. Below this there was a stricture and a twist, so that the stone was acting like a ball valve. Considering the condition of the patient, I should have been content at this time to have removed the stone and then had a gastrostomy done if it were still impossible to nourish her by mouth, gradually dilating her later as her condition improved. It appeared very easy to dilate her at this time and I did so, passing into the stomach without difficulty. I underestimated the weakened condition of her tissues, for she developed mediastinitis and died. While it was impossible to obtain an autopsy, it was evident that even the slight force required had ruptured the weakened œsophageal walls. In all branches of medicine we learn most from our mistakes, and I must confess that I have been able to profit my full share in this manner. We all have our tragedies. This case bears out the maxim of Dr. Jackson that we should always keep in mind, "Do no harm."

The question of malignancy along either the air or food passages is always a difficult one to answer, and, without the aid of endoscopy, together with biopsy, becomes a surmise, rather than a diagnosis. Cancer of the larynx may oftentimes be diagnosed by the laryngeal mirror, although direct examination with the laryngeal speculum and biopsy is usually more accurate and satisfactory, especially when the lesion is in the anterior or subglottic portion. Any case of persistent hoarseness and discomfort in the larynx should be studied with the idea of a possible malignancy. One of the most unsatisfactory conditions we have to meet is cancer of the œsophagus. Generally we see these cases only when well advanced,

and in time simply to allow the patient to select their undertaker. If ever a ray of hope for this at present 100% fatal condition is to shine, it will come through increasing vigilance upon the part of the family physician, resulting in early examination for apparently the most trifling symptoms attributable to the œsophagus.

Case No. 8. Female, aged 54. Difficulty in swallowing for some time. Taking liquids for two weeks. No pain or loss of weight. Indirect examination negative except for some impairment of motion of right arytenoid. Had had an enlarged thyroid for years. X-ray showed an obstruction in upper œsophagus behind cricoid with a somewhat symmetrical mass between larynx and œsophagus, encroaching upon latter and pushing former forward. No palpable glands. Question of malignancy, or malignancy or aberrant thyroid. Direct examination showed a cauliflower mass with superficial ulceration deep in the right pyriform sinus, involving the anterior and lateral wall. Specimen removed showed a squamous-cell carcinoma. The patient did not relish our hopeless prognosis and sought other council. According to report she was given serum treatments. Died in three months.

Sometimes the diagnosis of malignancy is extremely difficult to make. There may be a neoplasm in the partition between the larynx and œsophagus, with nothing presenting in the lumen. Other features may be so confusing that a diagnosis may be arrived at only after repeated examinations and most careful study.

Case No. 9. Female, aged 49. Severe rheumatism past two years. Difficulty in swallowing, shortness of

breath, somewhat aphonic and loss of fifty pounds weight. Had been in a sanatorium for eight weeks and discharged as non-tubercular. Rales in both lungs, normal temperature, no Tbe in sputa. Wassermann and Kahn tests negative. Metabolism test, plus 20. Talks only with great effort. Pain on swallowing. Abdominal cough only. Some regurgitation of food. Indirect examination showed considerable limitation of motion of cords, more on left, which would vary some from day to day. Jackson's sign positive, with some overflowing of fluid into larynx. Larynx asymmetrical. No anaesthesia of larynx. Tugging of cords noted on attempted phonation. X-ray showed a lipping of the 4th, 5th and 6th cervical vertebræ, probably arthritic, with abnormally calcified laryngeal cartilages. Barium remained mostly above cricoid, although some passed down œsophagus, and some was seen to trickle over into larynx and down trachea. No filling defect. No thyroid elevation on swallowing. Direct examination showed a web on the right side of upper œsophagus with the right pyriform sinus almost glued together. Posterior aspect of right arytenoid swollen, but did not feel indurated. No presenting mass. Specimen removed showed normal mucous membrane.

While diagnosis was not definite, I feel that she had a malignancy in the partition wall, although we considered crico-arytenoid fixation for a time. Laryngectomy might have been of some avail, but she died a few weeks later at her home in a distant town. No autopsy was obtained, nor could I get definite information as to her mode of exitus.

How frequently do we encounter laryngeal conditions in infants which

are apparently obstructive, and how many are examined directly? This may be one of the most serious conditions in infancy, with life depending upon correct diagnosis and management. Surely these helpless tots deserve the benefit of direct laryngoscopy, which is easily done without anaesthesia; rather than trusting to luck and inference. Indirect examination with the mirror is impractical, but the larynx can be easily and quickly viewed by means of the laryngeal speculum, and the proper treatment instituted.

Case No. 10. Baby, aged 2 months. Difficulty in breathing since birth. On breast three weeks. Worse since on bottle. Chokes on feedings, and as a consequence these have been given irregularly. Breathing worse on moving child, and when upright with head flexed forward and when on back. Better when on side. Not cyanosed. Voice sounds normal. Marked inspiratory stridor. Lungs normal (Dr. Piper). Subglottic but no substernal retraction. X-ray and fluroscopy show lungs nor-

mal; no compression of trachea nor enlarged thymus. Direct examination revealed a small, flabby epiglottis lying horizontal. On forcible inspiration the right edge folds over and the whole epiglottis disappears, being sucked down into the glottis. This does not occur on gentle inspiration. Epiglottis forcibly expelled on expiration. Aryteno-epiglottidean folds appear somewhat approximated. Diagnosis, congenital laryngeal stridor. Tracheotomy might be required. Amputation of the epiglottis, as done by Iglaue in one case, was considered. It was decided to try the effect of a properly balanced routine of feeding and management on the baby, the case to be under observation at intervals, and the mother warned of the possibility of necessity for emergency measures.

In closing, let me urge upon you the importance and value of endoscopic examination in all cases with symptoms referable to the air or food passages, not as a last resort, but as a routine aid in diagnosis.

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NOTICES

Minneapolis Meeting of the National Auxiliary

The sixth annual session of the Woman's Auxiliary to the American Medical Association was held in Minneapolis, Minn., June 11-15, 1928. Over 1,200 women registered, and they were delightfully entertained and cared for by the local auxiliaries.

The business meetings were largely attended, 400 women being present at the all-day session of June 14th. Much interest was given to the reading of the papers and state reports. There are now well organized and efficient units in thirty states.

The abstracted proceedings will be printed at an early date and a copy sent to the entire membership.

The following officers were elected:

President—Mrs. Allen H. Bunce, 360 Ponce De Leon Avenue, N. E., Atlanta, Ga.

President-Elect—Mrs. Geo. H. Hoxie, 3719 Pennsylvania Avenue, Kansas City, Mo.

First Vice President—Mrs. Evarts V. De Pew, 115 East Agarita Avenue, San Antonio, Texas.

Second Vice President—Mrs. David W. Parker, 52 Clark Street, Manchester, N. H.

Third Vice President—Mrs. Horace Newhart, 212 West Twenty-second Street, Minneapolis, Minn.

Fourth Vice President—Mrs. Frank W. Cregor, 1621 North Meridian Street, Indianapolis, Ind.

Treasurer—Mrs. Irvin Abell, 1433 South Third Street, Louisville, Ky.

Secretary—Mrs. M. T. Edgerton, 788 Penn Avenue, Atlanta, Ga.

Parliamentarian—Mrs. F. L. Adair, 2500 Blaisdell Avenue, Minneapolis, Minn.

Directors for two years—Mrs. John O. McReynolds, Dallas, Texas; Mrs. Wayne W. Babcock, Philadelphia, Penn.; Mrs. A. Haines Lippincott, Camden, N. J.

Directors for one year—Mrs. F. P. Gengenbach, Denver, Colo.; Mrs. Wm. E. Parke, Philadelphia, Penn.; Mrs. J. T. Christison, Minneapolis, Minn.

Chairman of Committees:

Organization—Mrs. A. T. McCormack, Louisville, Ky.

Health Education—Mrs. Geo. H. Hoxie, Kansas City, Mo.

Hygeia—Mrs. A. B. McGlothlan, St. Joseph, Mo.

Publicity—Mrs. R. C. Terrell, Fort Worth, Texas.

Program—Mrs. Southgate Leigh, Norfolk, Va.

Finance—Mrs. G. Henry Mundt, Chicago, Ill.

Entertainment—Mrs. Wm. Kuyden dall, Eugene, Ore.

Public Relations—Mrs. E. H. Cary, Dallas, Texas.

Revision of By-laws—Mrs. Morris Fishbein, Chicago, Ill.

Special appointments:

Auditor—Mrs. C. W. Roberts, Atlanta, Ga.

Historian—Mrs. E. V. De Pew, San Antonio, Texas.

Committee on Health Films—Chairman, Mrs. John O. McReynolds, Dallas, Texas.

Committee on Resolutions—Chairman, Mrs. J. N. Hunsberger, Norristown, Penn.

Committee on Credentials and Registrations—Chairman, Mrs. James N. Brawner, Atlanta, Ga.

Special Advisory Committee—Mrs. S. C. Red, Houston, Texas, and Mrs. Seale Harris, Birmingham, Ala.

U. S. Civil Service Examination

SENIOR MEDICAL OFFICER
 ASSOCIATE MEDICAL OFFICER
 MEDICAL OFFICER
 ASSISTANT MEDICAL OFFICER

Applications will be rated as received by the U. S. Civil Service Commission at Washington, D. C., until December 29, 1928.

The United States Civil Service Commission announces open competitive examinations under the above titles for filling vacancies occurring in the federal classified civil service throughout the United States, unless it is found in the interest of the service to fill any vacancy by reinstatement, transfer, or promotion.

There is especial need for medical officers qualified in tuberculosis or neuropsychiatry.

SALARY AND PROMOTION, DEPARTMENT SERVICE

The entrance salaries for these positions in the departmental service, Washington, D. C., are: Senior Medical Officer, \$4,600.00 a year; Medical Officer, \$3,800.00 a year; Associate Medical Officer, \$3,200.00 a year, and Assistant Medical Officer, \$2,600.00 a year.

No calls in this service have been received for certification for Senior Medical Officer or Medical Officer, these positions usually being filled by promotion. A probationary period of six months is required; advancement after

that depends upon individual efficiency, increased usefulness, and the occurrence of vacancies in higher positions.

There are vacancies in Indian Service, Public Health Service, Coast and Geodetic Survey, Panama Canal, Veterans' Bureau, and Field Service.

APPLICATIONS

Application blanks, which are required, may be secured from the following (the title of the examination desired should be stated): U. S. Civil Service Commission, Washington, D. C., or the Secretary of the U. S. Civil Service Board, Customhouse, Boston, Mass.

Book Review

Syphilis. By Charles C. Dennee, M. D. 304 pages: fully illustrated. Price, \$2.50. Harper & Brothers, Publishers, New York City.

A new idea in the publication of medical books is incorporated in the just published volume "Syphilis," by Charles C. Dennie, M. D., Syphilologist at the University of Kansas.

This work is addressed primarily to the general practitioner, giving him only those facts which he needs in his practice for diagnosis and treatment. In authoritativeness, convenient form and price, it succeeds admirably in filling his needs.

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No. 12

*APPENDICITIS IN CHILDREN

By DR. T. A. FOSTER, Portland, Maine

A member of this society for many years, in fact, my uncle, C. W. Foster, of Woodfords, told me one day about two cases of appendicitis which he encountered in his early practice. Allow me to tell you about them in a few words. These cases were seen about 1888. The first one was a young girl who had been pushing a swing for another child during the afternoon. In the evening she complained of abdominal pains and developed nausea, vomiting and fever. The final diagnosis was intussusception, and an operation was refused. An autopsy was secured, and examination revealed a ruptured appendix and purulent peritonitis. The other case was a young man who had abdominal pains, nausea and vomiting, was diagnosed appendicitis and successfully operated upon. On the third or fourth day, however, he died from secondary hemorrhage. Therefore the mortality in this small series of two cases was 100%.

Shortly after I heard this story, I heard a member of the Portland Medical Club read a paper on "Some Aspects of Preventive Medicine," and he stated, among other interesting facts, that appendicitis was responsible for the second largest number of deaths reported in a community not far from Portland. These reports made a deep impression on me, and stimulated me to investigate the prevalence and seriousness of appendicitis in children at present.

In going over the subject I have found some data which seemed very interesting. In a letter from Dr. George D. Cutler, of Boston, who has analyzed 836 cases at the Children's Hospital, I am glad to find a mortality rate of only 6.34%. In an analysis of 250 of his private cases he gives me the following figures: Acute appendicitis 101, mortality .98%; acute appendicitis, with abscess, 106, mortality 10.37%; acute appendicitis, with peritonitis, 43, mortality 20.93%; the mortality for the

*Read before the annual meeting of the Maine Medical Association.

three groups averaging 8.40%. Surely a handsome improvement over 100% of 1888. Please consider that the two cases of past history are used chiefly as a striking instance of the seriousness of the condition during those days, and not as an index of lack of diagnostic or surgical skill. I have examined twenty records from the Maine General Hospital and find the group mortality just 10%. One of these children died within forty-eight hours, a practically hopeless case. However, let me say that the mortality for all cases ranges from 8% to 10%. Then consider that Dr. Cutler's figures show that only .98% of acute cases fail to survive operation, but 20.93% of acute cases with peritonitis fail to recover. Therefore success in reducing the mortality depends upon early diagnosis and early operation. But early diagnosis is not so easy to make and early operation is not so easy to secure.

In this paper I would like to describe first three fairly typical types of appendicitis, then consider the signs and symptoms as they appear from analysis of cases, and in conclusion to cite some cases which illuminate the points in discussion. Let me describe, then, the children as I see them in practice.

DESCRIPTION OF CASES

The child complains of a pain in abdomen—a rather vague pain, but cramp-like in character. From the first complaint of pain the cases develop along different lines.

For example, child No. 1 may be quiet for a few hours, because of stom-

ach ache, refuse food, have a large bowel movement, fall asleep, and awaken apparently all right. Children with this mild type of infection may exhibit tenderness on pressure on right-hand side of abdomen, sometimes high, sometimes low and sometimes in the flank; they do not have definite rigidity, and they do not present nausea and vomiting. They recover appetite in a day, forget their pain and return to school and play. I believe many of these mild cases sooner or later have subsequent attacks of a more serious degree. But how to make with certainty a diagnosis of acute appendicitis in the first attack is a problem. I think *persistent* pain, although mild, and definite tenderness over appendix region justifies a diagnosis and an offer of immediate operation.

Child No. 2 may continue to have increasing pain, localizing over the appendix, maybe not localizing over McBurney's point, may develop persistent nausea and repeated vomiting, the group of signs and symptoms usually associated with appendicitis. Physical examination fails to elicit any muscular spasm or any definite area of tenderness. The temperature remains around 100, the blood count shows very mild leucocytosis. How surely to distinguish the trouble as appendicitis is another problem. I think the increasing and persistent pain, the persistent nausea and repeated vomiting make a diagnosis justifiable and again the offer of operation.

Child No. 3 may present all the classical symptoms and signs so elo-

gently described by Dr. Murphy, of Chicago, as follows: The symptoms follow each other in definite order. The first symptom is always pain. The pain is not near the appendix, but in the pit of the stomach. Thence it goes to the region of the navel and thence to the appendix region. The next symptom is nausea, followed by vomiting. The next symptom is fever. Tenderness and rigidity over the appendix region are now evident. An increase in the white cells of the blood is the result of the general infection and is of diagnostic importance. To make accurately a diagnosis with these signs and symptoms is not difficult and to urge operation is warranted.

Now, how do these children with their variety of signs and symptoms fit into the cold analysis of cases?

In Dr. Cutler's series of 250 personal cases, 246 complained of pain in abdomen. In our 20 cases, 19 complained of pain in abdomen—a severe pain in most cases. One history doesn't say whether pain existed or not. Therefore, *abdominal pain* comes first; second is *nausea*—219 out of 250, 17 out of 20; then comes *vomiting*—216 out of 250, 16 out of 20. One case not reported. Pains, nausea and vomiting stand out as important symptoms, and must suggest appendicitis with all sick children. The signs follow: Average temperature. In Dr. Cutler's 250 cases, 101; in my 20, 100.5. Pulse about 110 in both series, and respiration just above 22. The average white blood count in 250 cases, 20,000; in 20 cases, 16,500.

These figures make out the average

case moderately sick with a pain in the abdomen, usually localizing on right side, with nausea and vomiting, a slight elevation of temperature and pulse, and white blood cells.

With this picture in mind, why is it difficult to make a correct diagnosis with certainty—and it is difficult. An early operation, that is, an operation on the first day of the attack, is rather the unusual occurrence. Of the case histories examined at the hospital only one child was operated upon the first day of the attack. In Dr. Cutler's series, eleven were operated upon in less than one day after the attack, less than 5% of operations were done before twenty-four hours elapsed, but seventy-four were operated upon one day after symptoms started—21.6%—a good number.

The rapidity with which the infection spreads in childhood makes an early diagnosis desirable and an early operation imperative if we hope to lessen the mortality from this infection. Why, then, is it difficult to make early diagnosis and treatment? Because, I think, of the following infections, which may have many if not all of the symptoms and signs.

The first and commonest infection is the nose and throat infection, common garden variety. Dr. Breneman, of Chicago, in an excellent paper, called attention to this condition. He found that many children suffering with nose and throat infection developed all the signs and symptoms of appendicitis. The chief differentiating factors were these—a faster onset; presence of a red throat with mucoid or mucus; puru-

lent discharge, and a high pulse and temperature. Many of these children have suspicious abdominal signs.

The next is infection in urinary tract, more common in little girls. Pyelitis, with pain in right side, usually flank, with nausea and vomiting and some spasm of abdominal muscles, presents a picture of acute appendicitis; the history oftentimes of an up and down temperature—sometimes as high as 103 to 104, the presence of pus in the urine. Sediment examined under microscope eliminates acute appendicitis in this group.

Pneumonia and pleurisy in my experience do not simulate appendicitis as frequently as the above-mentioned cases. The high white count and X-ray pictures help to eliminate mistakes with doubtful cases.

Acidosis—true acidosis—which I believe to be an infrequent condition, presents some symptoms of acute appendicitis. However, most children with acidosis present an unforgettable picture—the child with cherry red lips, sighing respiration, scaphoid abdomen and lack of definite pain over appendix.

The above described conditions simulate appendicitis and make an anxious physician ponder. I want to insert here some cases which demonstrate the difficulties of an early and correct diagnosis.

First, a female child, v. w., aged 5. Well developed and well except for a mild chronic starch indigestion. Returned from school in morning with temperature 104, pain in abdomen—vomited once—and some general ab-

dominal tenderness. Examined a little after noon by two physicians, who considered abdomen presented spasm on right side, and condition was appendicitis. The mother and father were away, and operation was withheld until they could reach home, which would take six hours. At this time temperature had dropped, child was asleep, abdomen was not tender, throat looked red and mucous membrane edematous. Respiratory infection explained the signs and symptoms, child recovered without operation, and as far as I know has never had a subsequent attack.

Second, a boy, 6 years old, who lived a short distance from Portland. Gave a history of chilly feelings, pain in right side, nausea and vomiting, with a temperature increasing to 104. He was sent to a hospital for operation for acute appendicitis. The surgeon who saw him felt some doubt about the diagnosis, ordered an X-ray, and demonstrated a lobar pneumonia in right middle lobe. The boy recovered without complications.

Third, a girl, aged 8, awakens at night with pain in right groin, some nausea; in the morning vomiting, temperature 102, pulse 128, slight abdominal tenderness not localized over McBurney's point. Large enemas relieved abdominal distress and stopped vomiting, but pain in groin persisted, and on second day spasm developed low down in right lower quadrant. A diagnosis of appendicitis was made, immediate operation advised and accepted. An acute appendix was found low down on right side against the pelvic wall and rup-

tured during delivery. Fortunately convalescence was uneventful.

These three cases illustrate some of the difficulties in making a correct diagnosis. No family wants a child to undergo an unnecessary operation, and no attending physician wants a child with acute appendicitis to develop peritonitis before operation. Therefore, I believe, operation is advisable unless a definite and adequate diagnosis can be made to explain all the symptoms and signs.

On treatment, physicians seem near to agreement. Appendectomy in early cases has a small mortality, less than 1%. Appendectomies in cases with abscess and peritonitis have a high mor-

tality, up to 20-21%. The ruptured case needs excellent surgical judgment and delicate surgical skill at time of operation, and painstaking after-care. When to operate and how long to operate on children toxic from peritonitis seem to me decisions for thoughtful consideration and cautious technique. Some critical cases are saved by well-governed surgery and the mortality rate is lowered. But the rate will remain high, the group rate, until early diagnosis permits early operation. And we can save some of the little children if we examine every stomach ache carefully and repeatedly, and decide early that the ache comes from appendicitis.

*VINCENT'S ANGINA—SOME CASE REPORTS

By PERCY E. GILBERT, M. D., Madison, Maine

Most of the works on the practice of medicine have very little to say about Vincent's angina, either passing it over with a few words, or mentioning it under the differential diagnosis of diphtheria and syphilis. Since in my own experience it is one of the most vicious diseases I have been called upon to treat, and has had a mortality of 40%, a few words about the disease itself may not be out of place.

Vincent's angina is an ulceration of the mucous membrane of the mouth, tonsils and upper pharyngeal region, characterized by a thick, stringy, greyish-white, yellow or green-colored membrane, which strips off easily, leaves a

bleeding surface and reforms very rapidly. In this membrane are found two organisms, a fusiform bacillus and a spirillum, which last resembles the spirochæte of syphilis. The ulceration is usually superficial, but when deep it causes sloughing and may be the seat of a gangrenous, destructive necrosis. There are two types of the disease, one resembling diphtheria, which is often present with it, and the other syphilis.

The fusiform bacillus and the spirillum were first described by Miller in 1883, who found them in normal mouths, especially where there were neglected teeth. Their presence in the false membrane was not reported until

* Read at the staff meeting of the Sisters' Hospital, Waterville, Maine, July 10, 1928.

ten years later. In 1896, Vincent made a systematic study of it, and because of his work the disease bears his name.

There is some doubt as to the two organisms being the cause of the disease, because, while always present, they do not fulfill all the requirements of Koch's law.

Both are easily demonstrated in a smear, if present, for they stain readily with carbol-fuchsin. A suggestion about submitting a specimen for examination may be helpful. The outfit furnished by the state laboratory for diphtheria is practically useless, for the organisms are not easily removed from the cotton swab, and culture from this is seldom possible. A smear upon a glass slide and dried in the air is the proper method to use.

Vincent's angina often follows measles and scarlet fever, is common in patients who have leucemia, and often accompanies diphtheria, as was said before. Run-down conditions and exposure predispose to it, particularly where there are decayed teeth, old roots, pyorrhea or any foul or irritated condition of the teeth and gums. During the World War it was very prevalent among the troops in the trenches and was called "Trench Mouth," by which name it is still called by our dental friends. An English surgeon states that in one of the large English base hospitals in France it comprised 23% of all throat cases treated.

The **subjective symptoms** of the disease are slight, other than the soreness of the throat and pain upon swallowing. There is a bad taste in the mouth and an exceedingly foul odor to the breath, which odor, once smelled, is not easily forgotten. There is rarely any elevation of temperature, even in the fatal cases.

The pulse, too, does not increase greatly in frequency until late in the disease, at which time there is much toxemia and weakening of the body from lack of nourishment.

The membrane of Vincent's angina is thick, ropy, tenacious in consistency, easily pulled off, but will stretch out like a string and leaves a bleeding surface behind it. It differs from the membrane of diphtheria, in that it is more easily stripped off and does not break up as easily. As has been said, the color of the membrane varies, but, in my own experience, it has always been grey, greyish-white or green in color, never yellow.

Diagnosis is easily made, for a stained smear at once shows the two causative organisms. Also the lack of systemic disturbance in the early stages of the disease is significant. Examination should be made in every case for the Klebs-Loeffer bacillus, for the two diseases are often present together, and especially is this true when more than the gums are involved.

The prognosis is good in mild cases, though treatment is often a tedious process. The outlook is very grave when the throat itself is involved. Cases with leucemia are invariably fatal. Both leucemia and pernicious anemia may follow it, which shows that the blood itself is profoundly affected by some toxin.

Treatment is more or less unsatisfactory and many things are recommended for use. Each laryngologist, as a rule, has his own pet treatment, but it is a question if one is any better than another. Probably the best treatment, both preventive and curative, is the services of a good dentist, one who is alive to the seriousness of the infection.

Any of the arspenamines, used locally—either rubbed in dry or made into a paste with glycerine—usually give good results. Their use also intravenously or into the muscles is advocated. A solution of peroxide of hydrogen works well as a mouth wash to loosen and remove the membrane. Any astringent and antiseptic mouth wash will very likely make the patient more comfortable and impress him that something is being done for him.

In the cases I will now report, details will not be given to any extent, only to mention the most prominent features of each case. A bacteriological examination was not made in every case, and one might question the diagnosis in some, but since the conditions were alike in all, whether examined or not, I feel justified in calling them Vincent's angina.

Case No. 1. Boy, aged 12. In very good physical condition, teeth good, tonsils enlarged and diseased. I was called because the boy had a sore throat. A diagnosis of diphtheria was made and 10,000 units of antitoxin given at once. A swab was taken from the throat and sent to the state laboratory at Augusta, and the report came back, "Diphtheria NOT present." In the meantime the boy became worse, and five other children in the family were taken ill within a few hours of each other, all having sore throats with patches of false membrane upon the tonsils. Another doctor, called in consultation, made the same diagnosis, diphtheria, and though the report was negative, he felt it wise to give a fair-sized dose of antitoxin to them and a prophylactic dose of 3,000 units to the mother, who was caring for them all. In thirty-six hours the throats of all the

smaller children had cleared up. At the same time we gave the boy first taken ill 10,000 more units of antitoxin. It seemed to have no effect upon him, and the odor of his breath, so characteristic of Vincent's, became very pronounced. It became necessary to clean out his throat with a swab and dressing forceps twice a day to enable him to breathe, for his pharynx and tonsils, so covered with membrane and swollen, filled his throat and breathing was difficult. The weakness and prostration were very marked in this boy, for he was unable to take any nourishment, and when he could, vomited it, which last often occurs in these cases. After some six weeks his throat cleared up, but now his legs were paralyzed so that he was unable to walk and had to be carried about the house. The arm muscles were not so much affected as those of the legs, but movement was slow and difficult, nevertheless. After eight months this boy recovered from his paralysis and now is normal in every way.

Undoubtedly this case was one in which both Vincent's angina and diphtheria were present, and because of the Vincent's, the antitoxin had no apparent good result. This statement is made because of the rapid improvement and disappearance of the membrane from the throats of the other children after the administration of antitoxin. No examination was made for Vincent's, for at that time, 1922, little had been said about it in this state. Also it was a frequent occurrence for reports to be negative for diphtheria then, for the bacilli died and could not be cultured from the swabs, after the long journey from northern Aroostook county to Augusta.

Case 2. Woman, aged 46. This

woman was seen in consultation. The history was, as I recall, that some ten days before she had had a lower molar tooth extracted, and a few days later began to complain of sore throat. The tonsils became covered with a membrane and there was a left peritonsillar abscess, which her physician had incised. This case was diagnosed diphtheria and large doses of antitoxin given, with no effect whatsoever apparent. The membrane in this case was greyish in color, thick and ropy, and the breath had the foul odor so characteristic of Vincent's. The laboratory report was negative for diphtheria. The patient died a week later of exhaustion and toxemia.

Case No. 3. Girl, aged 8. This child had a sore throat, which had all the appearance of a follicular tonsillitis, which was my first diagnosis and also of a consultant. However, as a precaution, antitoxin in liberal amount was given. The child had been sick for two days when I first saw her. Two days later the membrane became greenish in color and the tonsils had a punched out appearance, from the necrosis going on. The breath was extremely foul, and there was much glandular enlargement under the chin and at the angles of the jaw. This patient vomited a great deal for a day or two. Bacteriological examination showed both diphtheria and Vincent's organisms present. She died about ten days after her first symptoms, death being due to suffocation. The larynx was much involved. Intubation was done, but she lived only a few moments after the tube was inserted.

Case No. 4. Boy, aged 8. This boy was sent home from school by his teacher because he seemed ill and had

an eruption on his face. When I saw him, a few hours later, he had an extremely sore throat and the tonsils were covered with a greyish membrane, which became greenish in color as the ulceration deepened. He had a slight temperature and some rapidity of the pulse, but neither were noticeable until one ear gave trouble later. The rash disappeared after twenty-four hours, and while it resembled scarlet fever, none of the three doctors who saw him had any explanation for it. Diphtheria antitoxin was given this boy, pending report on a swab from his throat, which was negative for diphtheria. There was also present in this case the foul odor always found in Vincent's. There was the most necrosis of the tonsils in this case of any I have ever seen. An ice bag at the throat and constant irrigation of the mouth with hot normal saline solution was all that gave him any relief. After the first week the throat began to clear up and then the pulse rose to 120 and the temperature to 104° F, and he began to complain of earache on the right side. The drum ruptured very shortly after this, and there was a copious discharge of pus for some days. Recovery was complete in this case in four weeks from the time he was taken ill. The following May, seven months later, I removed what was left of this lad's tonsils. They were very small, bound down so that it was a difficult bit of work to dissect them free for snaring.

Case No. 5. Woman, aged 26. This was another case of sore throat, with a greyish-colored membrane covering the tonsils, soft palate and the inside of the cheeks. Breath had a very foul odor, and both pulse and temperature were normal. Antitoxin was given and examination made for diphtheria, which was

not present. This case proved to be a very mild one of Vincent's angina, and was well after ten days. Treatment was only an alkaline mouth wash and nourishing food, which she was able to take, though swallowing was painful.

Cases Nos. 6 and 7. These patients were both young men, about twenty-five years of age, who had the disease about the teeth and were referred by their dentists for microscopic examination for smears from their throats. The fusiform bacillus and spirillum were found in each case. One of these was treated wholly by his dentist, who simply kept the teeth clean and painted about the gum margins with tincture of iodine. The other was given an intramuscular injection of 0.6 gram of sulpharsphenamine, and his dentist treated him locally. In this case improvement was apparent in a day or two, while the one having only local measures used was some six or eight weeks recovering.

Case No. 8. This man was in a particularly run-down condition, and, too, was a moderately active case of pulmonary tuberculosis. Some three weeks before his last illness, I had treated him for a mild attack of influenza. When first seen for Vincent's angina, his gums were mostly affected, though there was a small patch of membrane upon the uvula. This membrane was thinner than is usually the case, but when it had spread back to the anterior pillars and tonsils, the prostration of the patient was very marked. He was unable to eat and would make no attempt to do so, saying it hurt too much to swallow. Rectal feeding was used, but with little success. Sulpharsphenamine was given intramuscularly and as a mouth wash, but he simply went down hill and died after a ten days' illness.

Case No. 9. Woman, aged 27, mother of four children. This case had many interesting features and about as much acute trouble as one cares to treat in one patient. She was four months pregnant. Early in May I had examined her urine and found it normal in every way, as was also her blood pressure. Sunday, May 31, I was called because she was flowing and having pains "like labor pains," she told me. Examination showed miscarriage to be inevitable, and about 7.00 P. M. she delivered herself of a male fœtus, with a deformed head, the entire left side being absent. Placenta came away a moment after and all was apparently well. On Tuesday she began complaining of sore throat and backache, and her face about her eyes became œdematous. The feet and ankles, too, were badly swollen, and it seemed that her kidneys were at fault, which proved to be the case, for no urine was secreted until Friday and then only a drachm could be obtained by catheter. No urine was secreted in any amount until the following Monday. The urine was solid upon boiling, acid, contained no sugar, and microscopically there were many red blood cells, a few white and granular, blood and hyaline casts. Under sweating, hot packs to the back, the drinking of water, and enemas of saline, NaHCO_3 , the kidneys began functioning again, and at the time of her death she was passing about fifty ounces a day, though it still had the appearance of "beef pickle." The throat became much worse, and as the œdema left the upper part of her face the lower part became markedly swollen, from the Vincent's angina, which was present. Diphtheria antitoxin was given her and a specimen taken for examination for both diseases. Diphtheria was absent. The

inside of cheeks, all of upper and lower gums, tonsils, pillars and posterior pharynx were covered with a thick membrane, and there was some sloughing from under the tongue and much bleeding from the mouth. The mouth was rinsed every hour or two with peroxide of hydrogen solution, once a day the membrane was swabbed off as best it could be, and after swabbing, the mouth was freely rinsed with a solution of sulpharsphenamine. Because of the kidney condition this last was used only locally.

For a few days vomiting was intractable, and the patient said that her mouth tasted so bad it nauseated her. Little could be done for or with the patient during these few days, though rectal feeding was used and everything was withheld by mouth. When the vomiting ceased things looked more favorable, and she began to call for food and to enjoy it. She was much emaciated and her color was bad, but kidneys were functioning well, pulse was of a good quality, and she desired food and enjoyed it. Her blood pressure was 140/100 at this time.

On Thursday, June 21, patient said she was very tired and weak, and felt sicker than she had at all before. Her pulse went up to 120 and was of mean quality, and her temperature also rose

a degree. There did not seem to be anything to account for her symptoms. The mouth was very clean, and there was no complaint of soreness in the mouth. Things continued to grow worse, and Saturday, about 6.00 P. M., it was noticed that the left parotid gland was swollen and continued to do so, until it was very large. Sunday forenoon the right one did likewise. Both glands had a rock-like feeling to the touch. Evidently the organisms had invaded these glands and a relapse of Vincent's angina was present. She died about 8.00 P. M. Sunday.

Case No. 10. Young man, aged 20. Referred by his dentist, who was suspicious of the mouth appearance. Examination showed Vincent's organisms present. The gums were bleeding and there was a thin greyish-white scum on them, breath was particularly foul and great pain on swallowing. Sulpharsphenamine was given into the buttock, and his dentist is using it as a mouth application, mixed with glycerin, and rubbed in by the patient. This case is still under treatment and cannot as yet say what the outcome will be.

Since the above was written this young man has made a complete recovery and is back at his work.

Notice

The American Board of Otolaryngology held an examination in New York City, October 11th. One hundred and thirty applicants were examined; one hundred and thirteen were passed.

An examination was held in St. Louis, October 15th. Seventy-nine were examined; sixty-eight were passed.

The Board will hold an examination

in Portland, Ore., Monday, July 8th, during the session of the American Medical, and in Philadelphia in October, preceding the American Academy meeting in Atlantic City.

Those desiring information relative to the above will please communicate with

DR. W. P. WHERRY,
Sec. Board of Otolaryngology,
1300 Medical Arts Bldg.,
Omaha, Neb.

NECROLOGY

**Herbert Wilder Hall, Augusta,
1880-1928**

On the 2nd of November, Dr. Hall, for several years the capable pathologist of the Maine State Hospital at Augusta, died in the Augusta City Hospital, after a long illness from an obscure disease somewhat resembling the so-called Hodgkin's disease. It was a tedious and a painful last illness, but he went through bravely to the end.

He was the son of William and Ella Boynton Hall, of Dover, N. H., where he was born September 27, 1880. He took a two years' academical course at Colby University, and a medical course at Bowdoin, graduating in 1908, and during the next three years post-graduate courses in pathology, obtaining honorary mention in special X-ray studies. Directly afterward, in 1912, he became connected with the State Hospital at Augusta as the pathologist, and continued there, doing excellent work. His services at this post have been repeatedly emphasized as accurate in a most faithful and remarkable degree. His war services overseas, as pathologist also, were highly commended.

Dr. Hall was a rare man in medical ranks in Maine and was truly an expert; where others come near the mark, he attained it. He was a typical laboratory scientist, painstaking, accurate to the highest degree. Everything was carefully checked off, and his opinions were based on actual visible facts. He worked hard and industriously. He

was accommodating, not aggressive, retiring and very likable.

Dr. Hall married Miss Mabel Goodwin, of Augusta, and is survived and regretted by her.

**Henry Willis Hurd, Biddeford,
1872-1928**

Dr. Eben Hurd, a Bowdoin medical graduate of the class of 1843, was for years a country doctor at Goodwin's Mills, and there, May 28, 1872, a son, Henry Willis, was born to him and his wife, Susan Low Hurd. As a boy he was always talking of being a doctor, like his father. He attended the schools of Gorham, near by, went into business with wholesale druggists, gradually rode around with his father in his extensive country practice, and in these ways learned much about medicine and bedside practice. During intervals of vacation, he followed the lecturers at the Bowdoin Medical School and obtained there his degree in 1899.

His father, meanwhile, had removed to Lyman. There the young doctor began to practice, and after increasing successes he moved, in 1906, to Biddeford, where he continued onward and upward as a physician. He was liked as a man—strong, active, earnest, fine featured, and attractive personally. Such a man was sure to win, and he never faltered on the road. His last years were tormented with an internal affection, for which he was operated upon, but it returned, and he fell a rapid victim, leaving a handsome record.

He spoke well at medical meetings, wrote papers of value, and was long on the surgical staff of the Webber Hospital. He was what they all called a square man—he was honest in money and in medicine. Men liked him, and when men like another man then everybody else likes him. He took a great fancy to antiques and left a fine collection. He was famous with the rod and the rifle, a good fisherman and hunter, and a true sportsman for vacations.

Such was the praiseworthy record of our Dr. Hurd, and he will be missed in county and in Maine medical circles.

He married, in 1903, Miss Maude Bishop, of Fairfield, New York, the seat of an ancient medical school, and is survived by her and two daughters.

**Henry Leonard Kilgore, Belfast,
1885-1928**

After a tedious illness, terminating in a long-continued nervous breakdown, Dr. Kilgore died suddenly August 9, 1928. Born April 8, 1885, the son of Henry Leonard and Ellen Hussey Kilgore, of Belfast, his parents died early and he was brought up by his uncle, a physician also, and early took to medicine. After graduating at Colby University, he studied medicine and obtained his degree at the medical school connected with the University of Vermont, and followed his degree with post-graduate studies at McGill, where he obtained high honors and recommendations.

He practiced fifteen years in all in Belfast, and married Miss Marion Morgan, of Burlington, daughter of Dr.

George Morgan of that city, who survives him.

Dr. Kilgore had most honorable mention for his medical services during the great war, having charge at one time of almost three hundred patients, whom he carried successfully through an alarming epidemic of influenza, with small mortality.

Returning to Belfast, he resumed practice, but fell into a condition of extreme nervousness, which, with depression of spirits, followed him to the early close of his still promising life and practice in medicine. His regretful end will long be mourned, and sympathy is extended by his comrades in medicine to those left to lament his early departure from this life.

**Walter May Spear, Rockland,
1871-1928**

Whilst examining a patient in his office, November 17th last, this well-known surgeon died instantaneously. It is still hard to believe that life can so soon depart from an active body.

He was born in Rockland, December 31, 1871, the son of Col. Edward H. and Charlotte Brooks Spear, educated for a year at the Bowdoin Medical School, and then obtained his degree at the Harvard Medical School in 1896. He continued his studies in medicine and surgery as interne at the Carney Hospital in South Boston, and left there well equipped for practice.

He soon obtained a high standing in the profession, wrote papers of ability for our Association, one especially on "Intestinal Obstruction," bringing out

an ample discussion. He became a leader in the county society and in the state Association. He was a man of value to the people and to the Knox County Hospital, for which, by his personal influence, he had before, and of late, obtained a fine monetary endowment. He was skillful as a surgeon, and his results were exemplary. He was sympathetic with his patient, a man of intense personality and strong of will, but not always too obstinate in his opinions.

Early in life he accompanied an expedition to Labrador, he traveled to South America on an expedition to inspect hospital and medical men in that continent, and in the early spring of this year he made a voyage to Europe for his rather declining health. His steady complaint was of having nothing the matter with him, but of being always tired.

Dr. Spear was twice married. During the hour of his funeral, the business shops of the city were closed, a very unusual honor to be paid to any departed citizen, but it was testimony of the public esteem in which he was held, after a life of activity for public health.

**Augustus S. Thayer, Portland,
1835-1928**

Dr. Thayer, a former President of our Association, for twenty-five years its Treasurer, and one of its oldest members, died peacefully at Gorham, N. H., September 11th, aged more than ninety-three years.

Born in Paris, the son of America and Caroline Prentiss Thayer, he at-

tended the academies at Bethel and Paris Hill, studied medicine at the Portland School for Medical Instruction and at the Bowdoin Medical School, and was graduated at the University of Pennsylvania Medical School in 1864. He then settled in Portland, served as city physician for some years, was a teacher in the Portland School for Medical Instruction, and a member of that long-forgotten Medical Society, of the staff of the Portland Medical School. He belonged also to the Cumberland County and the Clinical Society. He spoke often at our meetings, and wrote some excellent papers. His presidential address to us was devoted to the stamping out of an epidemic of smallpox in Maine, affecting some twenty-five hundred patients, with considerable mortality. For the Clinical Society he wrote much, and especially on typhlitis, as appendicitis was then called, and he loved to entertain the members. He was honored with a banquet, with other veterans, at the Elks Club not long ago.

He practiced, first, on Brown Street, until driven out by business, and then in the house of Annie Louise Cary, Maine's beloved singer, on Free Street, from whence, in turn, he was again driven out by business.

Dr. Thayer believed in medicines, but his great forte was diagnosis. Know what you are treating, and you can do something for your patient. He was a successful practitioner from this point of view, quiet, reliant, persuasive and efficient.

Dr. Thayer was long a well-known

character in Portland, liked for his agreeable manners, his smiling face, and his perennial buttonhole pink, worn in memory of his sainted mother. He married, first, Miss Mary Marble, of South Paris, who died some years ago, leaving a daughter, Mrs. J. Murray Quinby, of Wellesley Hills, and later he married Mrs. Annie Soule, of Groveton, who died suddenly on the ninety-

first birthday of Dr. Thayer. Not long after this sad event he removed from Portland to live with his daughter and her children. He came back again, from time to time, and was always welcomed as a friend and guest. We were glad to meet the veteran, and he was glad to see friends and former patients once more, and, as he may have thought probably, for the very last time.

COUNTY NEWS AND NOTES

Kennebec County Medical Association

The quarterly meeting of the Kennebec County Medical Association was held at the Elmwood Hotel, Waterville, Me., Thursday, November 15, 1928.

The meeting was called to order at 5.00 P. M. by the President, Richard H. Stubbs, who presided over the clinical session, which included the following program: "Carcinoma of the Colon," Dr. J. P. Goodrich; "Orbital Tumors," Dr. H. F. Hill; "Dysphagia in Case of Scoliosis," Dr. V. Totman; "Intersusception," Dr. E. H. Risley; "Bullet in Spinal Canal," Dr. E. Paine; "Psychoneurosis Due to Ulcerative Cervix," Dr. E. P. Fish; "Treatment of Varicose Ulcers," Dr. F. E. Wheeler; "Prostatectomy with Spinal Anesthesia," Dr. J. E. Poulin; "Lipiodol in Diagnosis of Sinus Infection," Dr. F. T. Hill; "Diabetic Coma," Dr. J. O. Piper.

Dinner was served at 6.30, followed by a brief business meeting. The minutes of the last meeting were read and approved. The application for membership of Dr. Louis F. Fallon, Augusta, was received and referred to the Board of Censors.

At 7.30 a scientific session was held: "Injection Treatment of Varicose Veins," Dr. Hilbert F. Day, Chief Surgeon of Boston Dispensary. This paper was discussed by Dr. Walter Lemenson, Surgeon at Beth Israel Hospital, Boston, and Junior Assistant Surgeon at Boston Dispensary; "When Do Urological Symptoms and Signs Need Investigation?" Dr. Harvard H. Crabtree, Boston, Mass.

The members and guests present were: Drs. R. H. Stubbs, Warren B. Sanborn, Frederick R. Carter, M. A. Priest, Oliver W. Tunner, Norman Murphy, Roland McKay, Geo. Campbell, G. A. Coombs, S. H. Kagan, Augusta; Hilbert F. Day, W. Lemenson, Harvard H. Crabtree, Boston, Mass.; M. A. Webber, F. H. Freeman, Pittsfield; R. L. Reynolds, F. E. Wheeler, P. S. Merrill, Edward Paine, J. G. Towne, B. P. Hurd, L. G. Bunker, J. O. Piper, F. T. Hill, J. E. Poulin, V. C. Totman, E. P. Fish, E. H. Risley, J. P. Goodrich, Blynn O. Goodrich, J. F. Hill, H. F. Hill, Waterville; C. H. Newcomb, Clinton; E. P. Williams, Oakland; F. P. Ball, Solon; E. F. Pratt, North New Portland; F. E. Earle, Canaan; E. E. Ladd, Searsmont;

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